"MY WHOLE LIFE IS ON MY PHONE": HOW DO YOU SITUATE LEARNING FOR A DIGITAL WORLD?

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“MY WHOLE LIFE IS ON MY PHONE”: HOW DO YOU SITUATE LEARNING FOR A DIGITAL WORLD?

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CHAPTER I

INTRODUCTION

The first section of Chapter I attempts to make light of a serious problem facing schools: disengagement. While reading this short snippet from the 1986 movie *Ferris Bueller's Day Off*, we smile because we have all been there either in the role of the teacher or in one of the desks trying to stay awake as a well intentioned teacher tries to impart his knowledge to us.

> In 1930, a Republican controlled House of Representatives, in an effort to alleviate the effect of the …Anyone? Anyone? …the Great Depression passed the ….Anyone? Anyone? Hawley? The Smoot Hawley Tariff Act which…Anyone? Anyone? which…Anyone? raise or lowered? Anyone? raised tariffs in an effort to raise more revenue for the federal government. Did it work? Anyone? Anyone know the effects of the tariffs? It did not work and the United States sank deeper into the Great Depression. Today, we have a similar debate over this…anyone know what this is? Class? Anyone? Anyone? The Laffer Curve. Anyone know what this says? It says that at this point on the revenue curve you get exactly the same amount of revenue at this point. This was very controversial. Does anyone know what Vice President Bush called this in 1980? Anyone? Something economics? Voodoo economics." The camera pans to the children in the class, what we see are glazed eyes, a humongous bubble being blown, and of course the sleeper with drool running onto his desk. (Hughes, 1986)

In a small, rural Oklahoma high school classroom, I am reminded of this scene. I am horrified and wonder if this is to what I have been reduced. I do not lecture on the

economic causes of the Great Depression but I do discuss world religions where people believe that Buddha's mother was blessed by the trunk of an elephant. I discuss the beheading of King Henry VIII's wife Anne accused of incest and treason. We watch a re-enactment of the burning of Joan of Arc because she claimed that God spoke to her through her patron saint. These stories are better than the nightly status postings on FaceBook, yet the conversation remains in my hands where I find myself saying, "Anyone? Anyone?" These middle class students continue to be the passive recipients of knowledge and I the Giver (Freire, 1921). They are showing success in their academic accomplishments but have nothing to say. Are they simply Foucault's (1977) docile bodies fashioning themselves as subjects?

Background

I seem to be an unconventional social studies teacher. I create cooperative learning activities; I disperse students to participate in investigative work; assignments are often student-led; and classes are designed to stimulate conversation. My students struggle in this atmosphere; perhaps having rarely experienced the freedom to make decisions about their own learning, especially when it comes to discussing their thoughts, presenting questions, proposing solutions or thinking critically. When my students are first asked to answer questions from the textbook, we skip the first few and head right to the critical thinking section; they become disgruntled. They typically respond with, "What? We never have to do these. Why can't you just assign the definitions like everyone else?" When I don't give them specifics on how many sentences or paragraphs to write or what their product should look like, they whine and procrastinate. I recently presented a question about the treatment of Joan of Arc to my students at the end of a

class period, and then I asked, “Would you rather write the answer down on a piece of paper, bring it to class tomorrow and turn it in or text me an answer?” Quizzical faces lit up as I wrote my cell phone number on the board, I heard the words, “sweet,” and “awesome.” Then someone asked a question. “What about our spelling and grammar?” I responded, “I would expect a text, not an essay.” I told them I had to have a text answer by midnight or they were to turn it in on paper the next day. The bell rang, class was dismissed and within minutes I had received several texts, within hours many more, and much to my dismay several more came in at 11:55 pm. Forgetting that high school students are just getting warmed up at midnight, I quickly learned to move up the deadline. I responded to several asking for clarification or to give me a bit more and was pleasantly surprised that I always received a response. The next day in class, I started the conversation by specifically repeating the first part of a student’s answer and asking for her to finish. Her response was well thought out and articulate and others, especially those to whom I had responded affirming their correctness, started to chime in. Was this a conversation we were having? What caused it: The need for social intercourse, broken down barriers or just a good day?

The next day I received an unsolicited text from a student working on a late paper. I was coaching a game that night and was unable to respond. The next morning I received another text, “Why didn’t you text me, I waited all night?” Dalton had already failed the first semester of World History due to incomplete assignments. If he talks in class, he is a clown and never contributes to a class discussion, unless to lighten it up. He spends a few hours a day in an alternative education classroom because he has trouble getting along with teachers. He is of small build, somewhat handsome and works a night job at Pizza

Hut. His hair is dyed jet black and he wears printed skinny jeans with skate boarding shoes. He is generally well liked by other students.

We talked a little that day during class and he assured me he was going to work on his paper during a study hall. Within a few hours, he sent me a text asking a question about the requirements of the paper. I wasn't able to respond to him until after school. I answered his questions and then decided to experiment a little bit with him.

Me: So who won the Hundred Years War?

Dalton: France

Me: Against who?

Dalton: The English

Me: When?

Dalton: ummm, you got me there

Me: try

[After several minutes]

Dalton: 1337

Me: good, that's about when it started

Dalton: whew, Gabe told me, lol

This impromptu conversation turned out to be an exercise in engagement and critical thinking. A student who normally showed no interest in answering any questions in class engaged in a question/answer session with me. Not only did he participate with me outside of the classroom, he called out a life line to a friend who then took part in a conversation with him and more than likely did a little research about when the Hundred Years War was fought. When we were reviewing these facts in class, I could confidently

call on Dalton for answers and know that I was boosting his ego when he could boldly answer the question in front of his peers. Dalton was engaged, putting himself in a position to win, at least that day.

Classrooms in 2012

Since the Industrial Revolution, schools have been structured around time schedules and schooling of the masses, like an assembly line, often referred to as the Tyler Rationale (Doll, 1993). Hirsch (2010) argues that teachers should stick to the core knowledge; tell them what they need to know. If one holds an industrial age definition of schooling the learner is conceived as a product. Students are assessed and then drilled and skilled. The content of what should be learned is thought to be universal and the quality should be achieved in the outcome of the product (Hay, 1984). Testing is defining our approach to education (Taubman, 2009).

American schools subject children as young as six to standardized exams, despite the condemnation from experts. The extensive regiment is unparallel anywhere in the world and unprecedented in our history (Kohn, 2000). Brooks and Brooks (1999) dispute the belief that high stakes testing develops high standards because the relationship between test scores and unemployment is small (Levin, 2001). They contend that the test score mentality mistakenly assumes talent, restricting diversity when young people consider various professions (Bracey, 2003). But others would argue that student accountability and measurement enables educators to track the performance of students, schools, and teachers (Hess, 2004). Hess (2004) insists that by ensuring that students are equipped to face the world is the primary obligation of our public schools and that

withholding a diploma until students have mastered essential skills protects them from being thrown into a world in which they are unprepared.

Advocates of high standards and high stakes testing (Hess, 2004), describe them as the catalyst for social justice while others insist that these tests are instead machines for social destruction, widening the gap even further between the rich and the poor (Bracey, 2003). When a school scores low it is instructed to prescribe its teaching methods to scripted lessons and rote memory test preparation proven effective because they are research-based, according to Bracey (2003). While high achieving schools enjoy the freedom to explore constructivist practices which lead to creative thinkers and problem solvers (Vivalis & Vivalis, 2004). High stakes tests accelerate the reliance on direct instruction techniques and low level test preparation. Skills based instruction tends to foster low level uniformity and subverts academic potential (Kohn, 2000). Prescribed curriculum inflicts passivity on students. Knowledge is only meant to be passed from one person to the other and learning becomes something that is done to the learner (Fosnot, 1989). Schools are public spaces that are suppose to promise mobility, equal opportunity and a forum for participatory democracy, but they are overwhelmingly designed for top down distribution of knowledge (Fine & Weis, 2003). Teachers are finding it difficult to bring creative ideas to their classrooms when they are required to simply relay information, "akin to that of any worker on an assembly line" (hooks, 2003, p. 43).

Under high stakes testing accountability teachers tend to adhere only to form and substance, leaving room for little else. Weis (2003) asserts that the distribution of knowledge is highly routinized and rarely allows for students to pose questions or challenge the information; it was simply stated as fact. Schools that give students the

tools to pass standardized tests yet leave out critical thinking skills are simply practicing, "false generosity" (Freire, 1921). Freire (1921) describes this type of schooling as banking education. He says that the more students work at storing and depositing, the less they develop critical thinking. A student's actions should be more than simply receiving, memorizing and repeating. Students who exist in an environment like this get accustomed to being passive and speaking out is discouraged. "Banking education resists dialogue; problem-posing education regards dialogue as indispensable to the act of cognition which unveils reality" (Freire, 1921, p. 83). Teachers have the packaged information and students simply acquire it. Knowledge is not what emerges; merely a diploma. Students find that a diploma can be earned whether one asks questions and challenges information or simply sits to receive their package (Fine & Weis 2003). The move toward accountability has only worsened the problem. Current reform proposals will continue to fail because, again, they require passivity rather than creative thinking on the part of educators. Teachers are being told what to do rather than being empowered to make autonomous decisions to do what they know is right for their students (Castle, 2006; Grant & Murrray, 2002) The great deal of time spent on test preparation has undoubtedly stifled thought, discussion and question asking. Bracey (2003) call this education terrorism: a mighty "good way to destroy the nation" (p. 16).

In spite of this rhetoric agonizing over the woes of testing, states with high stakes accountability systems increased math performances in grades four and eight by 9.2 points between 1992 and 2000 while no accountability states showed an increase of only 3.8 points (Raymond & Hanushek, 2003). Hess (2004) reports that two-thirds of Americans routinely supports graduation testing and only twelve percent think that

children take too many tests. Eighty-seven percent of teachers in American schools believe that students should pass a standardized testing before being promoted (Hess, 2004). Hess (2004) calls for "sensible accountability" (p. 51) using student achievement scores to hold leaders accountable for student learning using systematic data and professional judgment.

Brooks and Brooks (1999) assert that despite passing all the tests, students are not learning. This calls for a look at the students of 2012.

Students of 2012

The student of 2012 is different from Generation Xers and is radically different from the Baby Boomers. The life mission of the student of 2012, called Millennials by Howe and Strauss, (2000) and digital natives by Prensky (2001), is to tear down old institutions that don't work and build new ones that do by challenging common assumptions. They are generally optimistic, cooperative and smarter than most people think. American parents are celebrating their children like never before spending record amounts on toys, computers, furnishings and safety devices. The children of 2012 are sheltered; they have no memory of sitting in school watching the *Challenger* Shuttle explode nor can they recall the eras of social and cultural upheavals in American history. Millennial children have had indulgent childhoods filled with fun, subversive mischief and a plethora of lessons while watching the double standard of the adult cultured elite (Howe & Strauss, 2000).

The students of 2012 are most often digital natives (Prensky, 2001). Born after 1980 and on the cutting edge they show a mastery of new technologies. Nearly three in four eight to twelve year olds use computers (Howe & Strauss, 2000). One of the

fundamental differences in the lives of the 2012 students is the way they communicate, socialize, create, and learn (Gibbons, 2002). Millennials have always been surrounded and interacted with technologies. Children living in this technology rich environment implore Prensky (2001) to hypothesize that there has been a change in their brain structure. If this is true, the 2012 student thinks and processes information in fundamentally different ways. These digital natives are accustomed to receiving information quickly, they like to parallel process, and multi-task. Millennials prefer graphics before the written word and function best when they are networked. They thrive on instant gratification and frequent rewards (Prensky, 2001).

The student of 2012 has adopted text messaging as their primary form of text-based communication (Lenhart, 2007). "Among all teens, their frequency of use of texting has now overtaken the frequency of every other common form of interaction with friends" (Lenhart, 2007, p. 2). Lenhart (2007) says that there tends to be a blending of several types of media; teen conversations flow from online, to text to voice where the text message helps to coordinates the shift between modes of communication (Setlus & Sohn, 2010). The student of 2012 has a range of different preferences and the c7rrent pedagogies in education do not fit (Gibbons, 2007).

Engagement

A student's level of engagement is seen as a valid indicator of school excellence (Axelson & Flick, 2011) and is at the forefront of academic success (Klem & Connell, 2004) but what does it really mean to be engaged? Over its 500 years of use, the word *engage* has been used to represent moral and legal obligation, usually indicating serious business or an act that would expose one to risk. As the word has evolved, its force has

diminished yet the idea of student engagement still garners attention. The word is multidimensional; it can describe behavior, emotions, or cognitive constructs. It is used in studies as a variable to explain or predict behaviors or learning outcomes (Axelson & Flick, 2011). Engagement has been described as the physical and psychological energy that a student invests both in quantity and quality (Astin, 1980).

There is a vast landscape to consider when it requires educating these Millennials. Their increasingly digitally mediated lives and literacy require new pedagogical thinking (Vasudevan, et al, 2010) that may involve using tools that they have at their disposal and are comfortable and adept at using (Camplese, 2008). Teaching methods may need to be situated to the world of the Millennial or risk disengagement. Educational literature shows evidence that many students are not engaged and become less so as they progress through the grades (Yazzie-Mintz, 2007). School engagement is essential in predicting academic success as well as preventing drop outs (Kindermann, 2007). Student engagement is key to addressing low achievement, boredom, and alienation; it is the link between higher achievement and greater educational attainment (Fredericks, et al., 2004).

School engagement incorporates behavior, emotion, and cognition (Fredericks, et al., 2004). Behavioral engagement includes attendance, participation, and positive conduct as well as involvement in classroom activities and learning tasks. Emotional engagement refers to the positive versus the negative reactions toward school, teachers, and learning activities. This involves a students' feelings of belonging and the value they place on school (Finn, 1989; Voelkl, 1997). An increase in emotional engagement will most likely lead to increases in behavioral engagement (Fredericks, et al., 2004) while on the other hand, lack of behavioral engagement leads to emotional withdrawal and lack of

identification with school (Finn, 1989). Cognitive engagement is the level of students' investment in learning; whether or not they apply the necessary effort for the acquisition of skills (Finn, 1989; Voelkl, 1997). New media and technology provide a link to all three of these forms of engagement, they have a real presence in schools yet they rarely enter into content areas or literacy learning beyond routine typing or loosely surfing the internet (Vasudevan, et al, 2010).

The digital generation of the Millennials has a natural affinity for this new media that can be tapped into for educational purposes (Dezuanni, 2010) specifically for the purpose of increasing engagement. These emerging media literacies create exciting challenges to educators to be, "pedagogically nimble in order to effectively support the literacy learning of adolescents who are engaged in these and many other literacies, which move across spaces of home, community and school" (Vasudevan, et al, 2010, p. 6).

Educators interacting with students through social media can be a key factor in knowing them better and building trusting relationships (Vasudevan, et al, 2010). Teachers that can create and build relationships with their students as individuals have a positive impact on engagement (Fredericks, 2011; Hughes & Kwok, 2006). This engagement increases when teachers listen to students and consider students' opinions when making decisions (Wentzel, 1998). These emotional bonds with school prevent negative outcomes (Catalano, et al, 2004).

Educators, and others who influence the lives of youth, "must take seriously the ways in which new media forms have altered how youth socialize and learn" (Vasudevan, et al, 2010, p. 22). Therefore, how might schools effectively engage the digital

knowledge and practices in which Millennials are already proficient (Vasudevan et al, 2010)? Classrooms, programs and learning environments contribute to engagement in complex ways (Fredericks, 2011). Student engagement is found to be higher in classrooms where tasks are varied, meaningful and challenging (Brophy, 2008; Newmann et al., 1992). Digital media literacy combines elements of traditional approaches with elements of technology and information education (Buckingham, 2007). Content, activities, and how teachers model thinking influence engagement and a students' appreciation for what is taught with the goal of helping students develop motivation to learn (Brophy, 2008).

This scenario can be achieved by providing authentic experiences that offer students opportunities to be in real world situations (Cowan, 2010) which include using the media tools that are available to them outside of school. This becomes increasingly important in the rapidly changing global world where Millennials are finding themselves. Engagement is higher in classrooms where students perceive instruction to be challenging and when they work in cooperative groups as opposed to teacher-directed, passive activities (Shernoff & Csikzentmihalyi, 2009).

Changing the context of a classroom does not come easily; however, descriptions of engaging classrooms show that it is not only possible but necessary (Eccles & Gootman, 2002). Schools dictate many consequences for the present and the future lives of young people (Elmore, 2009) and the consequences of disengagement are too severe to not begin to make changes (Eccles & Gootman, 2002). As Millennials engage in the practices of literacy and learning across a wide array of modalities both on and off line,

the role of the educator is becoming more complicated yet ripe with possibilities (Vasudevan, et al, 2010).

Situated learning theory

For this study I used the theory of situated learning (Lave & Wenger, 1991) as a lens through which to view and understand how text messaging as an activity leads to learning. Learning viewed as a situated activity is defined by a characteristic Lave and Wenger (1991) call legitimate peripheral participation. The term legitimate peripheral participant means that learners participate in communities of practitioners and that mastery of knowledge and skills requires these new learners to move toward full participation in the sociocultural practices of a community. For this study the community is the classroom, the practice toward which they are moving is conversation and the activity that is used in order to reach this goal is text messaging. Lave and Wenger's (1991) perspective implies that there is no activity that is not situated; emphasis is placed on the whole person acting within the world, where learning is not simply a process whereby knowledge is obtained through the transmission of abstract and decontextualized facts from one person to another, but a social process whereby knowledge is co-constructed.

Situated learning theory started with the idea of apprenticeship but has shifted to understand learning viewed as an aspect of all activity. Lave (2008) explains that learning is a process in which the participants change and are transformed through their actions and relations. This study will examine the participants and their activity with text messaging of how that actions facilitates their transformation in the classroom.

Definition of terms

Text messaging or SMS – short message service. Sending messages via a cell phone, Ipod, computer or other device that is capable of that application.

Conversation – Any discussion, dialogue or interchange of thoughts either by spoken words or electronic communication

Statement of problem

I struggle to find the missing piece that will encourage students to engage in thoughtful dialogue. The problem being considered within this study is the lack of conversation, active participation and engagement within a high school social studies classroom.

Eisner (2002) says that the kind of schools we need would encourage deep conversations in our classroom. Rote memory and basic knowledge level questions are not conducive to a student-led, investigative, conversational classroom Kohn (1999) in his book *The Schools Our Children Deserve* presents a 1959 quote by John Holt, "One ironical consequence of the drive for so called higher standards in schools is that they are too busy to think" (p. 21). Kohn (1999) contends that while Holt made this statement four decades ago, his message still rings true and the tougher standards movement is misguided (p. 21).

Kohn (1999) bases this 'misguided' assertion on several different aspects of the school reform movement. First of all, the preoccupation with achievement is not only different from the notion of learning but may, in fact, be harmful to learning. Secondly, he speaks of the type of instruction that tougher standards produce in schools. Basic skills or core knowledge gets poured down the students' throats. Paulo Freire (1921) calls this

banking education, whereby students sit passively while the teacher fills their containers with knowledge. Standardized testing and the imposition of specific requirements both lead to a version of schools that rely on these test scores to make decisions on curriculum and methodology. The idea of 'harder is better' rounds out Kohn's (1999) contempt for the shaky foundations on which the tougher standards movement is based. It seems, one can walk into any school in America and see a mission statement professing the creation of critical thinkers and problem solvers; yet instructional practices are enmeshed in test preparation, structured around finding one right answer from information that has been disseminated from the front of the room in Ferris Bueller fashion (Brooks & Brooks, 1999).

Day after day I try to pry discussion out of my students. We discuss religion, war, catastrophes, seductions and despots; how can students have no thoughts to share? A few might speak up now and then, but usually the same ones as the day before. The discussions stay on the surface, with only a few eager students looking for the right answer to my question. Others flip through the textbook trying to find something to quote. With my miniature, simple experiment I noticed that students seemed to discuss more freely in the classroom when they were first given the opportunity to answer within the safety of a text. I wondered if I might get them to discuss more thoughtfully, more critically using this tool. Could I break down some barriers that inhibit and prevent them from speaking out in class? Maybe the concept of engagement still carries with it some risk for students and teachers.

The National Standards for Social Studies Teachers (NCSS, 2002) call for teachers to present material through a constructivist view of learning as well as to use the

principles of teaching that have been identified as "essential characteristics of powerful social studies." Teaching and learning are powerful when they are meaningful, integrated, value-based, challenging, and active (Duckworth, 2006; NCSS, 2002). Conversation is one method that has the potential to engage students in all of these characteristics. I know through my own learning processes, that conversation is an activity that offers opportunities to change views and attitudes. Not only has conversation allowed me to change my perspective on issues but it also has provided an avenue for my views and attitudes to solidify. Our classrooms provide vital spaces for youth to interrogate their world and to challenge it (Fine & Weis, 2003) and conversation is an essential piece to this puzzle. Conversation is the connection to comprehension (Routman, 2000) and oral processes help students clarify and solidify their thoughts (Ketch, 2005).

Eisner (2002) sees deep conversation as analogous to deliberation. When students deliberate they search for possible answers, they explore blind alleys as well as open freeways. Eisner advocates converting academic institutions into intellectual institutions when conversations about ideas that matter to students take place. Intellectual understanding does not always come in the form of the right bubble colored in; it involves insight and that takes time (Duckworth, 2006).

According to Cazden (2001) discourse promotes positive cognitive improvement. In her book, *Classroom Discourse*, she outlines several reasons why conversation in the classroom is important. The theory behind information processing psychology relates the ideas of social interaction and communal interaction. Social interaction allows the expert student to demonstrate his or her strategies, making hidden thoughts public and shared.

Classroom conversation allows for communal interactions where a group provides a richer context for learning and students can share and distribute the cognitive burdens of thinking. Dialogue requires both language comprehension and language production therefore resulting in a deeper processing of information. Social psychology theory frames the idea around the social value of thinking and intelligence.

Purpose and significance

The purpose of this teacher research study was to use text messaging to engage students by occupying their attention so that they are more present in behavior, emotion and cognition (Axelson & Flick, 2011). Electronic text messaging is a technology that emerged onto the scene and has disrupted our society; things can never go back and are forever changed (Camplese, 2008). High school students are immersed in the electronic and cell phone world. If we, as modern curriculum leaders, could find ways to embrace these media as tools to increase the amount of classroom conversations, then we are being mindful in responding to our Millennial students. Currently our schools are embedded in the Tyler rationale that inhibit educators from spending time doing anything that cannot be measured (Kliebard, 1994). With the Tyler rationale in place, educational objectives become the criteria for the selection of materials, the methods teachers use and the tests that students take. We teach in groups, to the masses. We departmentalize for efficiency and effectiveness; and all that we do can be tested and measured (Kliebard, 1994). With a *Nation at Risk* released during the Reagan administration in 1983, more testing was demanded so that we could compare and compete with other nations (Kohn, 2000). Progressively, standardized tests have been legislatively mandated showing constituents that politicians are concerned with school achievement. Test scores offer a

quick and easy way to chart progress. Lawmakers are not realizing that the process of coming to understand ideas is not always linear or quantifiable (Kohn, 2000).

Emails, texts, and blogs might blaze a trail to take in order to create discussions in the classrooms. Electronic text messaging seems to have a positive effect on communication in the classroom. For one, students are eager to use their devices for school; it is novel (Langer, 1998). Secondly, there is a privacy afforded by texting that allows them to communicate more freely with the teacher than in a classroom of judgmental peers (Thurlow & Poff, 2011). Thirdly, formal grammar rules do not apply, so one who is not adept can still express opinions without feeling the negativity that so often accompanies inadequate written or oral expression (Delpit & Dowdy, 2002). Finally, students do not seem to express the same inhibitions that are present in classroom dialogue. Since classrooms are very crowded spaces, talk is controlled. It is the teacher's responsibility to use this crowded space to enhance the educational process (Cazden, 2001). What counts as knowledge and what occurs as learning are affected by patterns of language. Students have to negotiate the semiotic rules of school, which often vary from their home language (Delpit & Dowdy, 2002). How do these patterns affect the equality or inequality of students' educational opportunities? If potentialities of classroom conversation are to be significant for all students then Cazden (2001) reminds us that we have to pay careful attention to who speaks and who receives thoughtful responses. Texting may provide for a broader range of student participation and feedback.

Presently, there are very few high schools that do anything other than demonize cell phones. Schools are constantly devising and revising rules and policies in an attempt to keep up with the ever changing uses of cell phones. Fifteen years ago schools were

banning pagers, then the cell phone came on the scene and they also had to be banned. After the Columbine incident in 1999, schools acquiesced somewhat and began to allow students to have their phones but still no visibility or use (Thomas, Orthober & Schultz, 2009). Most high school policies refer to exactly when, where and how a cell can be used. "During class periods, phones may not be used for any reason (including talking, listening, ringing, text messaging, checking the time, taking pictures, etc). The phones must be powered off during class time. Phones may not be on, ring, or vibrate during the class period." Upland High School, 2012, para 1). This policy in a California school is typical. The punishment for an infraction is confiscation. Fortunately, this policy is going to have to be revised to include researching via the internet, constructing graphic representations, collaborating with peers, and watching or creating pod casts. There is a perceived danger of open access to online interactions that is fueled by moral panic over internet safety (Merchant, 2010). Schools districts have not only been banning cell phone use but they are also reluctant to incorporate social networking sites into the school environment citing school safety and liability as a cause, despite evidence from parents and students that participation in this sites has not generated problem behaviors (Cowan, 2010).

Schools usually have suspicion of anything that looks like or sounds like popular culture where students might be more knowledgeable than teachers. This lack of knowledge or familiarity is seen as the province of the young and foreign to teachers. Students have few models of good practice on which to draw (Merchant, 2010). As the definition of literacy expands,perhaps school systems will feel more comfortable

allowing previously banned media. Critical analysis of these media is impossible if they are banned from use when teachers can facilitate the learning process (Merchant, 2010).

Educators who embrace the idea of cell phone use in the classroom could enhance their classrooms in a variety of ways. By capitalizing on teens' affinity for their phones, they can be used to support content (Hartnel-Young, 2005). Cell phones can also be used to create student-centered lessons and foster collaboration (Corbeil & Valdes-Corbeil, 2007) and to differentiate instruction (Kukulska-Hulme, 2005). The inappropriate uses of cell phones that somehow seem to overshadow the positive possibilities must, of course, be addressed. Texting friends, playing games and surfing the internet are all distracting activities that students can do with their phones. Making a paper airplane, doodling in a textbook and reading a novel are also distracting activities; but we have not taken away paper, pencils or library books. Class distractions are a management problem, not a cell phone problem in the same way that cheating and bullying are morality issues rather than cell phone issues. Cell phones are readily available to secondary students, even it seems, in the most remote rural schools; why would schools not take advantage of this tool that comes at no cost to tax payers nor reduce precious and limited resources? An April 2010 study by Pew Research Center found that seventy five percent of twelve to seventeen year olds own a cell phone and eighty five percent of these teens have the text feature (Lenhart, 2007). Students between the ages of thirteen and seventeen send more texts than any other age group (Nielson Mobile, 2008). In the school that is it the site of the particular study, the percentage of those who have cell phones reaches to nineties.

While schools are battling the problem of students communicating with each other and the outside world during class time, teachers are battling the problems of

apathy and low student engagement. Duckworth (2006) explains in her book *The Having of Wonderful Ideas* that ideas and the opportunity to share them are central to intellectual development. Duckworth (2006) considers the essence of constructivist pedagogy is to give a student the occasion to have his wonderful ideas and to let him feel good about himself for having them. In order to feel good about them, he must be able to express those ideas in the social setting of the classroom. Children have been discouraged from using their creative freedom; when they know the right answer they possess only a passive virtue because they have been taught to merely mimic information presented by the teacher (Harry, 2003).

The purpose of this study was to discover what happens in the classroom when high school social studies students were asked to use text messaging as part of the planned curriculum. I observed, described and analyzed what happens in a high school social studies classroom when text messaging is used. This study helps to build understanding of the use of text messaging in breaking down barriers that impede classroom conversation. Educators may have a resource that aids in responding more effectively to the digital natives that we call high school students (Prensky, 2005). This study will add to the body of knowledge in our search as educators to identify what classroom conditions lead to learning and increased engagement. A teacher research study done in a naturalistic state could provide the reader a vicarious experience in which he/she could combine this new practical knowledge with their previous experience as a teacher to assist them in their classroom with similar problems (Stake & Trumbull, 1982). This approach could open up doors to the many uses of electronic communications and

cell phone uses in creating a learning environment that will promote a more highly engaged student and a critical thinker.

By experimenting with the use of text messaging I believed that certain themes would emerge that indicated why students engaged in classroom discussions after text messaging. I also believed that by doing teacher research using a directed content analysis method, education practitioners could take these findings and improve the well being of their daily practice (Stake & Trumbull, 1982). This teacher research study will give educators practical ideas and tools in finding new ways to promote engagement and participation in the classroom. I also hoped to provide information to educators and legislators that may change the way they view or use the tools that are at their disposal and the ones students embrace and find meaningful. A study of this nature may encourage others to try innovative techniques in their own classrooms.

This study is important because students should be engaged in class through interaction and conversation. Studies show that students who are engaged in class make better grades and are more likely to graduate (Klem & Connell, 2004). Building a classroom routine that encourages students to use cell phones to text the instructor and one another about course content may engage students in that content. This study was an exploration into how the tool of text messaging might be the bridge that carries students from passive recipients to conversationalists. Text messaging might inspire my Millennials to increase their participation in classroom conversation providing a gateway toward enhanced engagement leading to higher order thinking.

Research setting

The classroom where this teacher research takes place is in a small, rural town in Oklahoma. This town is unique in that it houses a four-year university, creating some academic diversity not usually present in farming communities The town square sits off the main highway where the population of about 5,000 enjoys a movie theater, several small specialty shops and a drug store with a soda fountain where school aged children join Old Timers for an ice cream cone after school. The football stadium is packed during the fall and the lights from the gym burn bright most evenings.

According to the 2011 School Report Card (Education Oversight Board), this community is eighty six percent Caucasian and the average property valuation per student is forty thousand dollars above the state average. The average ACT score is 20.4 and students score average or above average on End of Instruction tests. Although there is very little racial diversity, at any given time in the Wal-Mart parking lot one might see a Mercedes driven by a local rancher's wife parked next to a 1970 Chevrolet flatbed pickup with primer on the front fender. Ours is a typical small town filled with good, hardworking families who send their kids to school trusting that they will emerge educated.

Research question

What happens to classroom conversation when high school social studies students are first engaged in teacher-sanctioned text messaging about course content?

Sub-questions

- What happens to the transmission of assignments when text messaging is used?
- What happens when students receive feedback from text messaging?

- What happens when text messaging is used to influence class discussions?
- What happens to student/teacher relationships when texting is used in the classroom?
- What happens when text messaging is used a tool for learning?

Research design

This study employed a naturalistic inquiry approached by a teacher researcher. Inside this classroom I engaged students in cell phone text messaging and observed what happened. The qualitative method of directed content analysis was chosen in an attempt to complete and further describe prior informal research (Hsieh & Shannon, 2005). Content analysis focuses on the contextual meaning of the text (McTavish & Pirro, 1990) whether the data is verbal, in print, or electronic (Kondracki et al., 2002). The purpose of content analysis is to classify large amounts of text into categories that represent similar meanings (Weber, 1990). The goal of using directed content analysis allowed the theory of situated learning (Lave & Wenger, 1990) to be conceptualized and extended (Hsieh & Shannon, 2005). By using a directed approach I was able to use a more structured process (Hickey & Kipping, 1996) by applying theory and prior research. For example, interviews were conducted by asking open ended questions targeted by predetermined categories and then coding passages using those predetermined codes (Hsieh & Shannon, 2005). This method was chosen to allow the students involved to explain their likes, dislikes and preferences for class discussions initiated by texting and to aid in the discovery of factors that both promote and inhibit classroom conversations. Student interviews and text responses comprised the data that was to either stand alone as pure descriptions of their experiences or analyzed for connections among the various

dimensions of texting within the classroom (Bochner, 2001). The focus was to interpret the data in order to reveal, understand, and clarify the culture or situation that created it (Patton, 2002).

Content analysis, in part, refers to the act of searching through texts and interviews for recurring words or a theme to find what predominates, reducing the data in a sense-making effort attempting to identify core consistencies and meanings (Patton, 2002). The purpose of the content analysis was to understand the whole of the experience based on student concepts, not mine. By presenting the respondents in their own words I was able to get out of the way and report actual data. This data was the basis for my interpretation but also an invitation to the reader to make their own analysis or interpretation (Conroy, 1987).

This study was conducted within my own high school classroom, with the goal being to make education better (Castle, 2012). I wondered how I might increase conversation in my classroom, it did not make sense (Castle, 2012) that I was not able to summon the voices of my students. The combination of teaching and research defined by Castle (2012) is a systematic approach to studying teaching for the improvement of teaching and learning. This spiral process (Ellis & Castle, 2010) of teacher research began with a question and ended with specific actions in my classroom aimed at increasing conversation thereby enhancing my students' experience with World History. When the improvement of teaching and the quality of education is the primary purpose (Hopkins, 2002), inquiry then becomes axiomatic to good teaching (Meyers & Rust, 2003).

The difference in using teacher research over traditional research is its ability for application since research that teachers do on their own is likely to lead to changes in the classroom (Richardson, 1994). Teachers are critical to the success of improving education (Cochran-Smith & Lytle, 2009). It was my goal to bridge a gap between knowledge generation and knowledge application (Bradbury & Reason, 2006).

Teacher research springs from wondering and puzzling (Castle, 2012) over classroom experiences. My personal experience with conversation in classes prompted me to believe that my students would have a more fulfilling social studies class if I could increase conversation. I chose to use teacher research because I believed it to be a pathway to contributing to the body of knowledge that makes up best practices within secondary classrooms; it is "well positioned to produce precisely the kind of knowledge currently needed in the field" (Cochran-Smith & Lytle, 1999, p. 466). Hargreaves (1999) argues that much of the research conducted by academics does not reach the classroom but practitioners creating their own professional knowledge will lead to more effective teaching and learning. Problem-making teachers seek (a) to question the role of schooling in democracies and the socio-cultural impact of schooling and (b) to reveal the ideological and epistemological assumptions that shape the world of the classroom (Goodson, 1997). According to Castle (2006) an autonomous teacher participating in teacher research creates evidence to support decisions made about what is in the best interest of all, enabling the teacher researcher to exercise her professionalism. This study allowed me to watch participants, engage with them electronically, listen and document the changes that took place within the classroom.

Along with the conversation and the critical thinking that I hoped would change in a positive manner, I wanted to record the changes that were made in me as an educator. I wanted to understand how my formal education, along with my experiences as a teacher and my lived experience as a teacher engaged in an experiment, might transform me. Teacher research is found to have positive and personal effects on the researcher (Johnson, 1993; Stake & Trumbull, 1982). Questions are derived from a critical reflection of both theory and practice but I believed that it is the practice of the teacher, not the philosopher that will make the changes is schools (Stenhouse, 1981). By conducting this teacher research, I hoped to leave a mark both on my students and on the profession of teaching by taking an inquiry stance (Cochran-Smith & Lytle, 2009) and finding a voice in order to make a significant change that benefits students (Pine, 2009).

Limitations

This study posed few limitations yet there were some important issues to consider. The data collection did not interfere with our normal classroom; it simply was our classroom. Nonetheless the following section outlines possible limitations to the study.

1. Not all students have access to cell phones and the cost of text messaging may cause some to use it frugally, preventing them from fully participating in the project.
2. The clientele at this particular school is not very diverse; therefore, research into the possibility of opening doors to multi-cultural communication is limited.
3. Classrooms have a tendency to possess their own personalities; therefore, the differences in responses or conversation could be due to classroom uniqueness rather than the use of texting.

4. I am the teacher of record for the students being studied; therefore, I hold a position of power. Interview answers could have been given in an attempt to please me rather than accurately portraying their feelings about the use of texting in the classroom.
5. I must recognize that with all qualitative methodologies, the researcher plays a key role within the inquiry, I must constantly question the way that my own perspectives shape my questions and interpretations, especially using a directed approach to content analysis. An overemphasis on theory can blind the researcher to contextual aspects (Mayring, 2000); therefore, I must focus on how students perceive the effects of text messaging on their learning and their classroom experience.

Organization of the study

The dissertation will consist of five chapters. Chapter I introduced the subject and the reasoning behind it. Chapter one stated the problem, its purpose and addressed issues concerning research questions, design and basic methodology.

Chapter II reviews the related literature. Section one discusses the National Social Studies Standards and the calls for a classroom richer in conversation and critical thinking. Section two of the literature review discusses the nature of conversation and its importance to the classroom. Section three illuminates the dynamics of teacher/student relationships and how positive interactions lead to increased student engagement whereby negative or absent relationships pushes students toward indifference. Section four provides information on how cell phones and other types of technology are currently being used or dismissed in schools as well as how some pioneers are finding positive uses for them.

Chapter III offers detailed descriptions of the research design and procedures of the study. Included are: sample, methods, theoretical framework, ethical considerations, and trustworthiness.

Chapter IV reports the data that has been collected and through narrative inquiry and content analysis, I will analyze the findings based on themes that emerge.

Chapter V presents the conclusions and implications of the data. I give further recommendations for research that might advance the topic. I also provide educators the possibility for action in their own schools or classrooms.

CHAPTER II

LITERATURE REVIEW

The purpose of the literature review is to describe the reasoning behind the attempt to encourage conversation in my classroom and how the use of text messaging might bring forth more discussion. The National Council for the Social Studies (2002), new Common Core Curriculum (National Governor's Association, 2010) standards and the call for twenty first century skills all require students to be able to communicate, collaborate, and think more critically in order to become productive in the ever changing global and technically diverse work force. In order for students to meet the requirements of the new standards and to acquire twenty first century skills, engagement is crucial. Literature on relationships and teenagers and their cell phone use is explored in this chapter in order to illuminate potential for increasing student engagement.

The national standards movement

A state led consortium consisting of the National Governor's Association (NGA) and The Council of Chief State School Officers (CCSSO) met in April of 2009 to draft a set of standards that are called Common Core. Of the sixty five member panel, only one was a classroom teacher and there were no school administrators involved in the drafting. The current administration of Barack Obama is calling for all states to adopt these Common Core standards which would require all students to be college ready or career ready. The aim is to have fewer, clearer, and higher standards and unless a state adopts the Common Core standards it may face a reduction in federal aid (Mathis, 2010).

Standards are the foundation of a school system; they can inform teacher preparation courses and licensure, they can facilitate in professional development planning, and they, of course, shape curriculum and textbook selection (Carmichael,et al., 2010) yet some argue that standardization diminishes the rich variety of experiences and higher order thinking skills (Mathis, 2010) and learning is difficult to capture on assessment instruments that limit the boundaries of knowledge expression (Brooks & Brooks, 1999). Mathis (2010) cautions against locking into a one size fits all model that has the potential to reduce teaching to a narrow range of testable information that is unable to produce the knowledge or creativity needed for this new and uncertain age. Governor Whitehurst (2009), former Director of the Federal Institute of Educational Sciences, reports no relationship between the rigor of a state's standards and student performance. Thirty three of the thirty nine nations that score below the United States have national standards as well as the nine lowest performers. Of the top five scoring nations, three have no national standards. Whitehurst (2009) therefore claims that meaningful reform will require much more than a simple act of imposing common standards on the states (Mathis, 2010). Standards, according to Whitehurst, (2009) neither make nor break an educational system.

The call for richer classrooms

In 2002 The National Council for the Social Studies revised standards on what teachers should know and be able to teach. Rather than being full of names, battles and timelines, the document actually called for a shift from academic content toward performance based assessments. The document urges teachers to develop a constructivist view of learning, whereby learners develop what they know by fitting new ideas together

with ideas they have already learned. This can happen when students are influenced by the social and intellectual environments in which they find themselves. The NCSS (2002) describes essential characteristics for powerful social studies. Social Studies is powerful when it is meaningful and value based centering around the ethical dimensions of topics. Students who are asked to make decisions about controversial or morality issues have to think critically about their values and become aware of possible dilemmas. By challenging social studies students to develop well reasoned positions they must recognize opposing points of view and cultural differences as they approach their inquiry. Learning becomes active as students engage in reflective thinking and the construction of knowledge. "Social studies teachers should possess the knowledge, capabilities, and dispositions to create at the appropriate school levels learning environments that encourage social interaction, active engagement in learning, and self-motivation" (NCSS, 2002, p. 51).

The goal of implementing Common Core standards is to graduate every student prepared for college or the work force and President Obama has made it a national imperative to oppose the minimum standards set by most states. For example, most state standards, such as Oklahoma's Priority Academic Student Skill (PASS), focus on metacognition strategies rather than a mastery of essential content. A metacognition standard might ask a student to answer questions to aid in reading comprehension while a better standard would focus on final outcomes (Carmichael, 2010). Common Core standards still ask for the teaching of basic skills and content but encompass big ideas, problem solving, collaboration, and risk taking. The design is to increase student motivation to do more demanding work and to be engaged in it (Phillips & Wong, 2010).

The implementation of higher standards does not mean just more, with Common Core the intention is that students will be able to apply their learning and transfer their knowledge from one context to another (Phillips & Wong, 2010) and to elevate higher order thinking skills (Mathis, 2009). Policies that accompany Common Core enable schools to be responsive and collaborative as well as creative. Common Core standards call for discussion, team work, and other non lecture modes of learning that initiate the uses of different tools that will foster discussions among students. According to Common Core, students who meet the definition of college ready are tenacious and embrace academic achievement, which means that districts who are going to be responsive must allow for environments that encourage innovation (Phillips & Wong, 2010).

Regardless of standards, teaching by rote memory, scripted lessons and separating disciplines will not enable children to solve the real world problems of today (Cleveland, 1986). The kind of schools we need would be intellectually liberating, encouraging deep conversations, multiple right answers (Eisner, 2000) and opposing viewpoints (Langer, 1998). This cannot happen in a classroom void of dialogue. Schools should be helping students learn how to participate, how to listen as well as how to speak (Eisner, 2002; Fine & Weis, 2003). The best teachers understand the need to involve students in intellectual exploration (O'Neil & Tell, 1999). Bill Doll (1993) would argue that instead of the 3 Rs: reading, riting and rithmetic so common under the Tyler format or core knowledge, curriculum should be generated by the 4 Rs: richness, recursion, relations and rigor.

According to Doll (1993), richness within curriculum refers to openness with layers of meaning and recursion or reflection helps that open curriculum grow. Relations

refer to the cultural connections through which learners interpret curriculum as well as the relations within and between subjects. For example addition and subtraction are connected within mathematics but science is also connected to math. Rigor is the indeterminacy and interpretation that takes place while purposefully looking for alternatives, relations, and connections (Doll, 1993; Lewis, 2004).

Conversation in the classroom

Speech is what brings the cognitive and the social together (Cazden, 2001) and is an essential component in a classroom (Delpit & Dowdy, 2002). Richness in the classroom can be developed through dialogue and interpretations and can be applied to all we do with curriculum (Doll, 1993); it's the "thread that ties together cognitive strategies" (Ketch, 2005, p. 8). Speech is what gives students the ability to put what they already know with new knowledge (Cazden, 2001). It is what begins the process for finding meaning (Vivalis & Vivalis, 2004). Communication is central for three reasons: first because this is most basic way that students demonstrate what they know, secondly because communication enhances the purposes of education and lastly because the spoken language is important for students to form identities (Cazden, 2001; Delpit, 2002). Social interaction plays an essential role in knowledge development therefore when the teacher provides the opportunity for different types of talk, everyone benefits from more coherent learning (Atwood, et al, 2010).

Delpit (2002), Fine and Weis (2003) and Cazden (2001) discuss several questions related to equity in education, but one in particular is whether or not the patterns of classroom conversation affect the equality or inequality of students' educational opportunities? Teachers should pay special attention to who speaks and who receives

responses, since talking is significant for all students. Fine and Weis (2003) write of silenced voices and dominant ones that serve as barriers to equal access in our schools. By countering hegemony and transforming classrooms, schools could be communities that are progressive spaces determined to create more critically reflective citizens (Collins, 2003). Conversation is central for the democratic educator (hooks, 2003) helping students feel empathy and show respect for the opinions of others (Ketch, 2005). Open dialogue and the exchange of ideas can encourage students to value democratic processes whereby they contribute to their own learning as well as to the learning of their classmates (Vivalis & Vivalis, 2004).

Elementary schools seem to do a good job at allowing students to speak during traditional sharing times and elementary teachers are pretty effective at providing written responses to student work (Cazden, 2001). It seems that at the secondary level, the one who talks the most is the teacher and the students are to sit and listen. Education has been rigid and unchanging (Betts, 1992) and schools are places where the more knowledgeable transmits knowledge to the less knowledgeable whereby students are submerged into a "culture of silence" (Freire, 2003, p. 30). If a secondary teacher does invite students to talk, it comes in the form of a display question, where the answer is already known, either to test knowledge or to participate in the lecture. Authentic or divergent questions are less frequently or never asked. Students should be able to explain their own answers and listen to those of their peers creating a community of learners rather than the teacher being the sole authority on knowledge (Cazden, 2001). A divergent question asks the student to come up with problems to solve because there is no right answer. According to the Geneplore model, the highest levels of creativity require both convergent and

divergent thinking. For example, if students have a project that requires the generation of ideas they must involve themselves in divergent thinking yet when they need to explore those ideas in order to implement solutions; they will rely on their convergent thinking (Kaufman, 2012).

Since one of the goals of education is to produce change in students we can ask the question, "Does conversation change the unobservable thinking of the student?" Vygotsky's (1978) theory states that a learner, with help, can accomplish a goal that later can be done independently. There is thus a relationship between the student's thinking process and the interactions that are occurring in the classroom. That relationship is at the very core of student learning; therefore it should most definitely be at the core of a teacher's planning process. Teachers, responding to the national standards movement in an era of accountability and standardized testing have generally transformed lessons to include only that which can be easily and economically measured. A truly rich assessment would go beyond a multiple-choice test; measuring how students arrive at their answers and possibly even including collaboration. Such tests are more costly and would require major policy changes (Rotherham & Willingham, 2010).

"Thought, learning and knowledge are not just influenced by social factors, but are irreducibly social phenomena. Discourse doesn't make thought visible, rather thought is internalized discourse" (Cazden, 2001, p. 75). Dialogue becomes the "sine qua non" (Doll, 1993) or the prerequisite of recursion because without reflection brought about by dialogue, recursion is simply repetition, therefore teachers must actively promote and plan for conversation to happen (Cazden, 2001).

Without positive relationships with peers and teachers, students are unlikely to engage in class discussion (Osterman, 2000). There is a strong link between students' sense of community and motivation and relationships with both peers and teachers play a central role in building that perception of community (Osterman, 2000; Solomon, et al., 1996).

Relationships and student engagement

Good relationships with teachers and peers is linked with greater emotional and behavioral engagement (Furrer & Skinner, 2003) while students at risk usually exhibit patterns of withdrawal (Finn & Voelkl, 1993). Students who are engaged are more likely to report that they had a caring teacher and likewise those who were more engaged perceived more support from their teacher (Goodenow, 1993). Those students who participate at a higher level show an increased chance for initiating dialogue and displaying more enthusiasm for learning (Finn & Voelkl, 1993).

Klem and Connell (2004) conceptualize engagement as "a psychological process, specifically the attention, interest, investment, and effort students expend in the work of learning" (262). Emotional components of engagement include positive emotions demonstrated by enthusiasm, optimism, curiosity, and interest as well as the coping strategies that students employ when faced with challenges. Along with school environment, teacher support is vitally important to student engagement, and this connection is reported by both the teacher and the student (Klem & Connell, 2004). Middle school students are three times as likely to report being engaged if they have highly supportive teachers. Students who report having supportive, interpersonal relationships with their teachers have more positive attitudes and are more engaged in

their academic work. Engagement is one of the most robust predictors of student achievement, regardless even of the student's socio-economic background (Klem & Connell, 2004).

Students who report caring and supportive relationships within their schools have better attitudes toward academics and are more satisfied with school; therefore they are more engaged (Osterman, 2000). Conditions that contribute to student success include high standards that include meaningful and engaging pedagogy and curriculum but in order for students to take advantage of higher expectations and a more advanced curriculum, they must have support from the people with they interact(Kim, Solomon & Roberts, 1995).

An affective quality that is needed between teacher and student in the classroom is mutual trust (Cazden, 2001). The goal then becomes to find alternative ways to form relationships that create an engaging and supporting learning environment (Cazden, 2001; Finn & Voelkl, 1993). Adolescents' perceptions of "school fit" point to the importance of school as an environmental context that should meet their needs; when there is a better fit, engagement, motivation, and performance are expected to improve (Zimmer-Gembeck, et al., 2006).

Technology and student engagement

So what is it that might engage the Millennial students of 2012 and how will schools meet the needs of students who are growing up with evolving technologies? These students are adapting to these new and innovative technologies much more quickly than educators (Spires, Lee & Turner, 2008) and current teaching strategies do not seem to fit (Zimmer-Glemek, et al., 2006). Data indicate that students want to be engaged in

school and the use of technologies is motivating (Grant & Branch, 2005). Students enjoy school experiences that are related to careers that they might have in the future and they understand that technology is used in the professional world therefore important to acquire the skills to use it (Spires, Lee & Turner, 2008). Students describe ideal school environments to look more like the world in which they live outside of school (O. Edwards, 2007) which is often a sharp contrast when the technologies that they embrace are restricted at school (Spires, Lee & Turner, 2008). Prensky (2006) claims that students "are capable of reinventing schools for themselves" (p. 202) and that the best designs for learning can come from the students themselves. Students clearly see a link between the use of technology and their academic engagement (Spires, Lee & Turner, 2008). Prensky (2006) asserts that "kids are training themselves to be ready for the world of the twenty first century" (p. 203). The desire and need for students to have more access to technology as a tool for learning and academic engagement is real (Spires, Lee & Turner, 2008) Students want to bring their experiences as part of a social network outside of school into school to increase their academic engagement (Spires, Lee & Turner, 2008; Pew Internet & American Life Project, 2005). Policy reports indicate that states need to ensure these technology needs are being met (V. Edwards, 2007) and that students are receiving a twenty first century education (Spires, Lee & Turner, 2008).

Twenty first century skills

There is a new educational landscape that has emerged that is so different that teachers can no longer use twentieth century knowledge or training (Prensky, 2005). The new work force demands a next generation who are independent thinkers, problem solvers and decision makers (Gewertz, 2008). Some even argue that content no longer

matters but that the ways of knowing information are more important (Rotherham &Willingham, 2010). Knowing how to think critically, analytically, and creatively are not skills unique to the twenty first century (Silva, 2009) yet the ability to find and analyze information coming from multiple sources and to use this information to make decisions and create new ideas has become newly important. For the first time in history people are inundated with data that has to be accessed, managed, integrated, and evaluated (Dede, 2009).

The types of tasks that are the easiest to do, involving routine cognitive work and manual labor, are now done by computers whereby jobs that emphasize expert thinking or complex communication – tasks that computers cannot do – are growing in the nation's labor force (Levy & Murnane, 2004). Collaboration is yet another twenty first century skill that is not new but increasingly complex. Interactions with peers may happen half way across the world while never meeting face to face. This type of cooperative interpersonal capability requires skills that are higher and involve more sophistication than the prior industrial era (Dede, 2009).

The twentieth century kindergarten through twelfth grade curriculum emphasizes pre-digested information to build fluency in problem solving rather than presenting data in complex settings and asking students to filter it in order to develop skills in problem finding. With twentieth century instruction knowledge is generally separated from skills and presented as truth instead of an understanding that is discovered or constructed. A twenty first century skill would extend the simple data learning to include the development of understanding beyond the information so that it can be assimilated into decision making (Dede, 2009).

A twentieth century classroom might ask students to present learned knowledge but twenty first century lessons spend time on group interpretation, negotiation of shared meanings and co-construction of problem resolution (Dede, 2009). This requires students to be articulate and engage in conversation. Common Core standards move schools closer toward providing environments that allow responsiveness to the innovation needed to reflect twenty first century requirements (Phillips & Wong, 2010) yet current assessments do not typically measure technical applications or the various forms or mediated interactions (Dede, 2009).

Because the cell phone is such a defining feature of teenagers it has revolutionized the way that young people communicate, socialize, create, and learn (Gibbons, 2007). A twenty first century classroom operating under Common Core standards might use the cell phone and its text messaging application to engage students to participate in classroom conversations moving them closer to the student that collaborates, constructs and problem solves creatively.

Cell phones, teenagers, and the classroom

Digital natives (Prensky, 2001), net generation, google generation or millenials (Gibbons, 2007); these are just a few of the names that describe tech savvy young people who have always been surrounded by and interacted with technologies. Prensky (2001) has even hypothesized that children think and process information differently due to a change in the structure of their brains. Digital natives are used to receiving information quickly, they like to parallel process and they are adept at multi-tasking (Prensky, 2001). They expect information to always be available and technology inside the classroom

should match what they can do outside (Camplese, 2008). This has profound implications for education (Gibbons, 2007).

Currently there are 4.6 billion mobile subscribers worldwide; that is approximately half of the population (Porath, 2011). In 2009, eighty four percent of teens had phones while eighty percent of those had text capabilities, sending an average of fifty per day (Lenhart, 2009). Children ages thirteen through seventeen send more texts than any other age group (Nielson, 2008). The mobile phone is a rite of passage, a part of this generation's culture and is an integral part of their identities (Thomas & Orthober, 2011). These numbers show a strong indication that teens are engaged by this technology and motivated to use it.

Students report using their phones for school related purposes. Sixty-one percent say they talk about school work, while sixty eight percent say they use it for school housekeeping functions like reminders. Ninety-two percent found their phones to be valuable assets for school (Lenhart 2010) yet most cell phone uses can be inappropriate and undesirable for middle and high school classrooms (teachingtoday.com) and more than once students have been caught with cell phones full of test questions and answers (Buzzard34). Teens are heavy users of text messaging and school authorities are responding by blocking their use. Schools argue that these media are distracting, isolating, and disruptive and they are trying to control the harmful and distracting uses of electronic media while children are at school (Subrahmanyam & Greenfield, 2008).

Text messaging has become the preferred way to communicate for teens allowing them to explore and practice self-disclosure as well as self-preservation (Subrahmanyam & Greenfield, 2008) and providing almost constant contact (Porath, 2011). Texting

evidently enhances communication allowing for multiple or even parallel communicative exchanges (including face-to-face interaction), offering an attractive combination of mobility, discretion, intimacy and play. This combination…drives the underlying need for sociality," (Thurlow & Poff, 2011). Self-disclosure and self-preservation are both important for teens to construct a coherent identity (Subrahmanyam & Greenfield, 2008) and not only are teens constructing their identities on line but they are marketing their identities (Camplese, 2008).

Educators say they notice that those who text are better communicators and that texting does not interfere with standard literacy (Boss, 2007; Thurlow & Poff, 2011). Texters are less likely to experience writer's block and are able to apply their short text hand to their note taking (Boss, 2007).Student literacy scores show no significant difference between those who use text speak over those who don't (Drouin & Davis, 2009).

For at-risk students, the cell phone has become their favorite medium and they will engage in tasks such as dictionary applications and google when before they would sit idle (Geary, 2008). Integrating technology and putting it in the hands of the students, offers the classroom teacher many tools that will excite and motivate all students. They feel empowered by their engagement in the learning process. They are familiar and capable of using the technology therefore they had increased motivation and self-efficacy (Heafner, 2004).

Social networking and blogging can also enhance the education process, even further than university created tools such as Blackboard (Camplese, 2008). Everywhere in the world, cell phones and computers are being used to collaborate, communicate and

innovate, so why are schools responding with bans (Geary, 2008)? This should change the discussion from how can we stop students from using their cell phones to why are we not using cell phones in education? Cell phone use in schools would allow education to transcend boundaries of time and space imposed by school (Geary, 2008). Collaboration, new creations and sharing could happen immediately as students will move their conversations into electronic environments, with or without teachers (Camplese, 2008). In universities, students are holding their own online discussions while it is rarely happening in the classroom because teachers are so bound by the traditional paper and pencil activities (Boss, 2007). Students tend to make more thoughtful statements in online discussions than in class because they are more comfortable with online forums than with talking in class (Boss, 2007; Camplese, 2008).

Technology has the potential to promote student to student, student to content and student to teacher interaction (Jonassen, Peck & Wilson, 1999) and the act of text messaging has great instructional potential. The challenge now is to manage the negative uses of the cell phone while preserving their significant contributions to education (Subrahmanyam & Greenfield, 2008).

Theoretical framework

Using technology in the classroom, specifically text messaging is situated. Relationships, levels of engagement, and learning activities situate students in the process of participation within the community of the classroom. I used Lave and Wenger's (1991) theory of situated learning and legitimate peripheral participation to form the framework for understanding what happens when text messaging is used in a high school social studies classroom. The theory states that learning is necessarily situated and is a process

of participation in communities of practice. Newcomers join such communities via the process of legitimate peripheral participation and learn by immersion in the new community and by absorbing its modes of action and meaning as a part of the process of becoming a community member or a full participant. (Lave & Wenger, 1991).

The domain in which this theory fits is high school social studies, the community in this study is the classroom and the practice is the text messaging. Lave and Wenger's (1991) theory states that learning emerges from our actions in relation to those of others. So learners, by way of peripheral participation, are inevitably drawn into communities of practitioners and as knowledge is mastered, the learner moves closer to full participation.

> Being alive as human beings means that we are constantly engaged in the pursuit of enterprises of all kinds, from ensuring our physical survival to seeking the most lofty pleasures. As we define these enterprises and engage in their pursuit together, we interact with each other and with the world and we tune our relations with each other and with the world accordingly. In other words, we learn. (Wenger, 1998, p. 45)

Decartes said, "I think, therefore I am." Lave and Wenger (1991) might spin the famous Descartes quote and say, "I experience, therefore I learn." The emphasis of situated learning theory is the idea that much of what is learned becomes specific to the situation in which it is learned (Greeno, Smith, & Moore, 1992; Lave, 1998; Lave & Wenger, 1991). It is a theory rooted in pragmatism and action in the neo-phenomenological tradition represented by social theorists such as Berger and Luckmann

(1966) who contend that a human being's self-production is always a social enterprise. They say that society is a human product and a human is a social product. Situated learning theory particularly focuses on the way experience is seen as experience of meaningfully structured situations (Arnseth, 2008). These situations, according to Lave (1998) are the lived-in world, the world as it is experienced through and in social practice. This learning occurs as participation increases in communities of practice and "concerns the whole person acting in the world…focusing attention on ways in which it is an evolving, continuously renewed set of relations" (Lave, 1991, pp. 49-50).

Situated learning theory asks, "How do people engage with a culturally structured world?" They engage because knowing is conceived as a way of acting within a community of practice and to learn is to gradually become able to master procedures through participation. Simultaneously, learners must master the semiotic and technological tools of the community. In other words, they must be able to speak the language spoken in schools, and be able to maneuver within the tools. These may or may not be the same language or tools that are used in their homes. "Knowledge of the socially constituted world is socially mediated and open ended. Its meaning to given actors, its furnishings, and the relations of humans within it, are produced, reproduced, and changed in the course of activity" (Lave & Wenger, 1991, p. 51).

The legitimate peripheral participants in situated learning theory could be compared to a person working as an apprentice. They start with easy tasks and then move on to more difficult ones. Each step offers an opportunity, often unstated, to consider how the previous step contributes to the present one. This ordering of steps "minimizes experiences of failure and especially of serious failure" (Lave & Wenger, 1991, p. 72).

This can be translated to mean students who fear speaking in class because they want to avoid embarrassment in front of their peers might engage if they are first given an opportunity to disclose in private via a text message, the risk of failure is minimized.

Lave and Wenger (1991) speak of the functions of a tool and whether or not the learner can make sense of it and incorporate it into meaningful human practice. In this study the tool is the text messaging. The transparency of any technology (the cell phone) always exists with respect to some purpose (gaining knowledge) and is intricately tied to the cultural practice (text messaging) and social organization (the classroom) within which the technology is meant to function. It cannot be viewed as a feature of an artifact in itself but as a process that involves specific forms of participation (texting knowledge to the teacher) in which the technology fulfils a mediating function (p. 102).

Therefore, the meaning of any action is dependent on how it experienced, how it is articulated and perceived by other participants in the community who are engaging in the same practice. Their meaning and significance is produced and reproduced in situ (Lave & Wenger, 1991). Included, is the idea that engagement is key to school success and that novelty in the classroom leads to engagement at this time, text messaging in school is novel. The interaction that happens via text messaging may help create an environment of increased learning and critical thinking.

CHAPTER III

METHODOLOGY

This chapter addresses research procedures and the design of the study in an attempt to better understand how text messaging in a high school classroom affects attitudes, engagement, learning and ultimately classroom conversation. The following chapter describes the participants and how they were selected, the methods used for data collection and how the strategy of directed content analysis assisted me in extracting themes relating to this teacher research study.

Participants

The participants of this study were students currently enrolled in tenth grade level world history in a rural town situated in northwest Oklahoma. Of the four classes that could be subjected to the study, all were relatively the same in ethnicity and age, with the biggest difference being socio-economic status. There were sixty one students spread between four classes. The first class period was relatively small in number, only fifteen students. They were smart but usually came in sleepy and stayed very quiet. Of the eight girls and seven boys all were Caucasian except for one Hispanic boy who was also older than the other students. In terms of grades the class held an average of around seventy eight percent; they worked quietly and independently most of the time. The second class period was more awake and interested in class conversation. There were seventeen students in this class with ten boys yet the girls seemed to dominate the class. All of these students were traditional tenth graders and all were Caucasian. This class maintained a low B average most of the year. The third class period was directly before

lunch and was much more rambunctious than the others. The boys dominated this class in number and voice, preferred to work in groups and enjoyed joking; conversations in this class usually took a sarcastic or comedic tone. This class was also completely comprised of tenth graders and had one female Hispanic student who spoke English as a second language. Out of sixty one students, only two students chose not to participate in texting activities, and this class had one of them: a boy who did not want his teacher to have his cell phone number. This class also had a set of twin girls who were very competitive with their grades, one being much more vocal than the other. The last class in the study was a very small class, consisting of only seven students, three girls and four boys. All of the students were Caucasian except for one girl who was a mix of Hispanic and African American. This class was interesting because two of the girls always chose to sit together in the back, while three others huddled near the front corner. The other boy, who was a "refusenik" (Willet, 2009), hovered somewhere between these two groups, always having an interesting or off mark comment. A refusenik is defined as a young person who has made a principled decision not to engage (Willet, 2009). In this boy's case he was not financially unable to own a cell phone; he had just chosen not to own one citing that "people should really just talk to each other." He seemed to enjoy not owning one, giving himself a unique identity.

Every student in this school was required to take World History as a sophomore so these sixty one students made up almost the entire class. Other than the refusenik, all of the other students had access to a cell phone, iPod, or other device with texting capabilities. Access was not completely equal though, with three students sharing a phone among their siblings or having an older model phone without QWERTY, a full keyboard.

About forty percent of the students owned a Smartphone with the capability to access the internet or to load other applications.

All of the students were solicited as participants and agreed to participate in the study as normal classroom students, having their behaviors observed around the use of their cell phones. In this teacher research study every student, though assured that non-participation carried no penalty of any kind, chose to participate, allowing me, their teacher, to record their texted conversations related to course content. Each student named in this study has been given a pseudonym. The addition of text messaging in the classroom became part of the normal routine which allowed students to answer questions or complete homework assignments via a text message; students always had the opportunity to use traditional paper/pencil methods to respond to questions or homework assignments. Text messaging simply became an alternative method to complete an assignment.

At times, some classes randomly remained without the use of cell phones for texting purposes while other classes were asked to use their cell phones for various purposes but mainly to answer questions, engage in conversations and formulate thoughts. Every student had the opportunity to use text messaging but possibly for different assignments or purposes depending on which class the student was in. These exercises using text messaging were included in the normal planned curriculum and then data from interviews were analyzed only from those who agreed to participate in them. I used a stratified sample obtained by independently selecting a separate simple random sample from each population (Patton, 2002) or classroom. Students were easily divided into different groups, due to the school schedule.

Research design

My study fits the description of a teacher research study. According to Brown (2010), the teacher researcher is one "who engages in research in their own teaching settings…"(p. 276). Teacher research is defined as "systematic, intentional data collection and analysis to gain understanding of their own research question" (p. 277). Teacher researchers work from an emic perspective (Shulman, 1997) along a spiral composed of planning, action and fact finding (Lewin, 1946). The knowledge base that guides classroom studies emerges from the identification of a problem that leads to inquiry and research (Bauman & Duffy, 2001; Castle, 2006). A teacher research study that is both pragmatic and goal oriented (Shulman, 1997) has the potential to promote teacher autonomy (Castle, 2006). A teacher research study is intentional and systematically conducted by mixing theory and practice all while continuing to teach (Shulman, 1997). A study done by a teacher in his or her own classroom is powerful because people have a great creative capacity. Change is likely to occur when people fully engage in an experience using their own resources to learn more about their situation (World Vision, 1993). The utilization of results empowers stake holders to make use of findings while giving them the power to do so (deMarrais & Lapan, 2004). Teacher research as a methodology guides this study of text messaging in the classroom because it puts me, the researcher, in a position to resolve my own curriculum and pedagogy problems (Stenhouse, 1981).

After gathering data including texted narratives and interviews, I used the method of content analysis to search through those stories to find recurring words or themes (Patton, 2000) focusing on contextual meanings (Cavanaugh, 1997). This sense-making

effort took a volume of qualitative data and attempted to identify core consistencies and meanings (Patton, 2000) in order to classify themes and patterns (Downe-Wamboldt, 1992; Patton, 2000). The classification and coding produced a framework for organizing and describing what had been collected (Patton, 2000).

For this study I used a directed approach which guided my initial codes (McTavish & Pirro, 1990) based on situated learning theory (Lave & Wenger, 1991), research on teens and texting as well as a few limited prior incidents with texting in my classroom. A directed approach helped focus research and interview questions and provided predictions, thus easing the search for initial coding schemes and relationships between codes (McTavish & Pirro, 1990). The analytical process was a tool used to organize the story of the data (Patton, 2000). These initial codes simplified the early task of placing chunks of data into categories. After reading re-reading and regrouping the chunks eventually the chunks made their way into the five themes of easy, learn, challenge, feedback and talk.

I represented the students by using their own words, thus inviting the reader to make their own analysis and interpretation. My analysis will facilitate the reader's understanding of the situation under study (Conroy, 1987). I attempted to get out of the way, in order to let the data speak for itself (Patton, 2000).

Procedures

The first portion of my study was simply to record, observe, and take notes of our normal classroom behavior, paying particular attention to conversation. There were many times that I literally felt like the instructor depicted in the movie *Ferris Bueller's Day Off*, asking, "Anyone….Anyone…?"

I then began to introduce text messaging by giving a simple question near the end of the class. We had been discussing revolutions, which was a very current topic that semester with uprisings in Tunisia and Egypt, and many more on the horizon. We discussed terms such as "nationalism" and "liberalism." Our discussion of liberalism included the idea that people should be as free as possible from government restraint and that civil liberties should be protected. I wanted these current rebellions to fuel discussions over the American Civil War. In lecture format I informed students of several rebellious situations that were precursors to the American Civil War: the Dred Scott case, Bleeding Kansas and border ruffians, the Wilmot Proviso, and the raid on Harper's Ferry. The mixture of these incidents highlighted people involved in civil disobedience as well as attempts to make change through legal or political channels.

At the close of the lesson in the first three classes, intentionally leaving out the fourth, I wrote my cell phone number on the board and immediately asked the question, "Which is more effective in responding to unjust laws, civil disobedience or working through the legal or political systems? Text an answer by 8:00 a.m. tomorrow morning."

The next day in class I used specific student text responses to initiate discussions. I offered examples from texted answers in the hopes that the sender would respond, or I called on students directly by saying, "I liked what Johnny said about taking the bull by the horns. What did you mean by that?" I used text answers generated by students themselves, hoping to get a discussion started. I had also responded by text to a few of the text messages, hoping to provide the senders with a sense of validation. I continued to also ask questions to students in a traditional manner, via the textbook's section review, which the students had also been assigned to be completed in paper/pencil format. I

attempted to start discussions based on those questions as a way to compare how students responded.

The second text question was one that students could find the answer by looking in the book or by remembering answers discussed in class. I wanted to determine if or how this type of question would impact text answers and the class discussion. I continued to experiment with different levels and types of questions. Text questions were also asked about material we had just discussed as well as questions for which the students had little or no previous knowledge. Text questions were sometimes convergent, asking them to them to think more deeply or critically as well as how much of their time, outside of class, they were willing to give to me via texted discussion.

I varied among classes how I would lead the class discussion after a text question was initiated, based on successes and failures, just as I would as I move through a normal day, adjusting and modifying based on student reactions and responses. I was simply trying out approaches and methods for using text messaging to promote engagement and learning. I was also interested in finding out if students could weave their text answers into a face-to-face class discussion when the prompt was not a copy of the text question. For example, the text question was one for which they could give a textbook answer, such as the question, "What was Marx's definition of political power?" I deliberately gave a lot of feedback by text and then started a class discussion on communism in general and listened for thoughtful responses based on text answers and feedback.

I experimented also by asking a question that students were to answer over text while in the classroom, and I gave immediate feedback as the answers came in. In another class, students were to text to another student and give feedback to each other. I

compared audio of these lessons with a class who answered the same question through a more traditional write-around, in which students commented on a question and then passed their answers to another student who then added to the response. I intentionally used the write–around in the class with the refusenik. With most text responses I would award points similarly to what they would have received for answering on paper, but during these sessions I withheld awarding points for text responses. I did this simply because of the logistics involved in grading students' texts to one another, but then wondered how students would respond to doing this work without their efforts being applied toward a grade. Situated learning theory guided my decisions based on the concept of apprenticeship; students were able to enter at various levels of engagement based on comfort and knowledge level. As their confidence increased, they moved closer to full participation in classroom conversation. Every participatory action, regardless of depth, paved the way for increased engagement and learning.

After using text messaging in the classroom I downloaded an application called DISCO onto my cell phone. This application allowed me to enter a group of phone numbers so I put each classroom in a group. I could then send out one text and every student in the group would receive it, then each student response was also seen by everyone. We were essentially in a chat room.

At the end of the semester I asked for volunteers, from among those who had consented, to interview. Initially I asked students privately if they would like to visit about their experience with using text messaging in class. As students finished their interviews they returned to class and talked with their peers about interviewing; this inspired several students to volunteer publicly to talk with me. I did, however,

specifically ask the two students who chose not to engage in text messaging to allow an interview, and they both obliged. I found it clearly appropriate to use the voice memo application on my phone to record their interviews. The interview was very casual but based on a specified set of interview questions. Clandinin and Connelly (2000) write that, "the conditions under which the interview takes place also shape the interview: for example, the place, the time of day, and the degree of formality established" (p. 110). The interviews were conducted outside of our classroom, either in the library or student commons area, yet during the school day and usually during the student's class period. Each transcribed interview was assigned a pseudonym.

Data collection

The research design evolved as I gained insight into just how the text messaging could be used to promote learning. I revised my methods of collecting data as classroom situations and students called for it. I asked five questions that students could respond via text; three of these questions were divergent in nature while the other two were simply responses that could be found in their textbooks; in this way I collected five hundred eleven text messages. For example, the number of text messages from one question ranged from fifty six exchanges to just one. I collected the written or traditional responses from participants who chose not to text, albeit a small number. Three test questions were given that emulated texts and I collected those tests in order to compare participant test answers with text responses. I collected and transcribed the two class conversations that took place via DISCO. I audio-taped classes in an effort to capture the classroom conversations that were initiated based on text responses. The classroom audio taping was somewhat intrusive because of the device that was forever sitting on a desk, but

eventually it became the norm and most did not know when it was on or off nor did they continue to comment on its presence. I interviewed and transcribed interviews from twenty six students who volunteered, using a structured interview protocol. I journaled on a daily, sometimes even hourly, basis to record my observations, thoughts, questions, and ideas.

Recruitment

As the school year came to a close, I asked students if they would like to talk about their experiences with using text messaging in the classroom. Each student had previously completed an assent form as well as a parental consent form. Both forms had sections that included permission to send and receive text messages as well as a section providing permission to be interviewed. Only students who had permission to interview were allowed to participate, but only those who actually volunteered when the time came were used. Several students wanted to interview together with another student, and their requests were granted. Students were assured that the interviews were not part of a grade and were only useful for the study and to determine whether or not I would continue to use text messaging in the classroom.

Trustworthiness

Valuing the separate realities that were created by individual participants added soundness and credibility to the study. "Trustworthiness is established by the use of techniques that provide truth value through credibility, applicability through transferability, consistency through dependability and neutrality through confirmability" (Erlandson, Harris, Skipper, & Allen, 1993, p. 132).

Credibility in naturalistic studies can be gained through prolonged engagement (Erlandson et al., 1993). I started my research during the fourth 9 weeks of a year-long course. I had developed a rapport with my students that included mutual trust and acknowledged expectations. I knew the culture of each of the different classes; some were more talkative, others more studious and then another a bit more rambunctious. I observed persistently (Erlandson et al, 1993) and journaled about classroom conversation and the lack thereof. I introduced text messaging so that I would have some data to compare. Erlandson (1993) encourages researchers to seize the moment and take personal risks; be purposeful and assertive. Even though I had received permission from both the principal and superintendent, the use of cell phones in my classroom did not go without scorn from my fellow teachers. I became bolder at using the outlawed cell phone and did not keep our assignments underground. Engagement provided the scope, while observation provided the depth to the study. I watched and listened. I observed the students with their phones when their access was unfettered (Erlandson, et al, 1993).

I gathered multiple sources of data to provide triangulation and have linked pieces of information by expanding sources and linking student interviews with work samples, text messages or classroom audio. Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings. Methodological triangulation refers to the use of more than one method to gather data and data triangulation refers to the gathering of data through several sampling strategies so there are slices of data at different times, situations and on a variety of people (Denzin & Lincoln, 2005). I used both methodological and data triangulation during collection of data. The audio-taping I did would be categorized by

Erlandson (1993) as meeting referential adequacy. Listening to the classroom conversation after text messaging gave a more holistic view of the contexts and provided supportive background for analysis and interpretation.

There were several ways that I triangulated data in order to help establish trustworthiness. I could compare text messages with test answers; several students indicated in their interviews that they felt more prepared for a test when they had previously engaged in text messaging over the content. After affirmation from students that they talked more in class after text messaging about the topic, I could listen to classroom audio for confirmation. I was also able to compare hand written student answers to text answers that they had sent. Finally I was able to use my journal to reflect on daily changes and nuances that were taking place in the classroom.

Transferability can be gained by including thick description allowing the reader to get a feel for what happened when text messaging was used in a high school social studies classroom. "The object of the game is not to focus on the similarities that can be developed into generalizations but to detail the many specifics that give the context its unique flavor" (Lincoln & Guba, 1985, p. 201). Through purposive sampling I was able to not only show the actions of typical students but to also report on outliers who chose not to send text messages.

Dependendability and confirmability add to the trustworthiness of a study if the researcher leaves audit trails and participates in reflexive journaling. "The key to the audit trail is reporting 'no fact' without noting its source and making no assertions without supporting data" (Erlandson et al., 1993, p. 150). According to Lincoln and Guba (1985), a reflexive journal is a kind of diary in which the researcher regularly records

information about him/herself and how the study changed her; it becomes part of the audit trail. I journaled constantly, in reflection of successes or failures of a lesson, changes that could be made, and often on the expressions or comments of a particular student.

Ethical issues

The students participating in the study were my own students, so I was committed to making participation in the study completely voluntary. I played two roles during the study: teacher and researcher. The role of teacher always trumped that of the researcher and I constantly kept in mind that text messaging was only an alternative method for the completion of work. All students received grades for electronic responses but those not participating received the same credit for doing traditional work or using a folder created on the server for electronic exchanges, albeit no student took advantage of the electronic folder. I ensured that students had equal access to computers and ample time during the school day to complete responses on line. Not all students participated in interviewing. I only interviewed those who had assented and volunteered, returning properly completed assent and parental consent forms as approved by the University IRB.

I provided a layered consent form for both the student and the parent or guardian of the student. Within this form was information about the study including the use of text messaging, audio taping in the classroom and interviewing. Each student and parent could consent to each of these layers individually. Forms were also sent to the building principal and the district superintendent informing them of the nature of my research as well as my rationale. Both quickly consented even though building policies on cell phone use were going to be violated. I was very clear in all of the consent forms that text

messaging was completely voluntary and students would always have an opportunity to do work and receive credit through traditional methods.

Closing

Several factors have led me to this study, but I think the most compelling has been the notion that the classroom has turned into a sterile environment where direct instruction is the norm and the art of conversation is an unimportant skill. I believed that conversation is what aids in changing thoughts and attitudes (Huba & Freed, 2000) and world history was an ideal setting. This study is framed by Lave and Wenger's (1991) notion of how social relationships and situations play a role in learning and knowing. Situated learning theory (SLT) focuses on the relationship between social situations in which learning occurs rather than simply the acquisition of knowledge. The social is given a primary role in shaping and constituting reality and social practice is the primary source of inquiry for any study of learning and knowing (Lave & Wenger, 1991). This study examines texting as a social engagement providing a context in which learning can take place. By engaging in the act of text messaging with the teacher or fellow students, the learner or the apprentice, begins to acquire the skills necessary to become a full participant or become involved in classroom conversations. Learning then becomes a cooperative activity because learners increase their participation in performances, therefore providing for growth. This type of situation suggests that learning is a way of being in the social world; engaged so that learning will occur (Lave & Wenger, 1991).

CHAPTER IV

FINDINGS

This study was designed around the goal of creating more classroom conversation and analyzed using the methodology of content analysis within the framework of situated learning theory (Lave & Wenger, 1991). The literature, the theory and prior experience with texting in the classroom acted as a guide for research and interview questions as well as initial codes. This chapter shows how the interviews directed the analysis toward the themes of ease of use, depth of learning, meaningfulness of feedback, sense of challenge, and enhanced classroom conversation. Student voices display those themes in their own words while analysis and theory accompany the data excerpts. Included in this chapter are stories from seven students whose experiences with text messaging in the classroom revealed an aspect not originally predicted. This chapter shows, through excerpts from student interviews, how text messaging for the classroom bridged the gap between a traditional classroom and a classroom situated around discovery and conversation. The chapter concludes with an explanation of how the analysis of the five original codes and the seven stories merged into an overarching theme of intellectual risk taking.

Themes

Because I followed a directed approach format to content analysis (McTavish & Pirro, 1990) it is helpful to know the contents of the interview. The goal of a directed approach is to extend a theory which had already provided the focus of the research question as well as predictions for initial codes (Hsieh & Shannon, 2005). I identified key concepts before creating the script for the interviews therefore providing an environment in which participants would answer open ended questions followed by targeted questions about predetermined categories. From the research sub questions, the interview was structured as follows:

1. Did you answer teacher prompts as a texter or in a traditional format?
2. What do think about using your cell phone for school?
3. How do you feel about receiving credit for an answer you submit via a text?
4. How do you feel about sending a text to your teacher?
5. How do you feel about your teacher sending you texts and having a conversation with you on your cell phone?
6. Can you tell me about any particular instance when you learned something about the topic from texting that you probably wouldn't have gotten from a more traditional lesson?
7. Did texting affect the way you talked in class?

a. Can you tell me about a specific topic or discussion that you remember having that was first answered in a text?
b. How did you think texting affected the class discussion overall?

8. Can you tell me anything positive or negative about using text messaging in the classroom?
9. Do you think there are other ways that cell phones could be used in the classroom? What are those?

By asking these questions I was able to obtain student thoughts pertaining to the directed content. The interviews were analyzed in order to identify the patterns of experiences brought by the participants (Patton, 2002). The goal of content analysis is to allow the researcher to gain knowledge and understanding of the phenomenon under study (Cavanaugh, 1997). The phenomenon in question was text messaging, investigated through work samples, interviews, and observations. This is a research method used for the subjective interpretation of the content of the text data through the systematic classification process of coding and identifying themes or patterns (Downe-Wamboldt, 1992).

I began the process of listening to student voices attempting to isolate the meanings of their words from interviews but I had trouble keeping what I knew of the "kid" out of the raw interview data. The research participants were fifteen and sixteen year olds who are short on talk anyway, hence the research problem. They are unaccustomed to talking one on one with their teacher and most were somewhat nervous.

Most participants were brief and very to the point, elaborating very little as they continue to need practice in the art of conversation. I wondered, if we had texted the interview would I have received longer more descriptive answers? Snapshots of their classroom behavior, along with the text messages came together to complete a rich picture of the whole student involved in school work and text messaging.

I searched the transcriptions for recurring words or themes (Patton, 2002). What phrases or words predominate and are used consistently? The themes that emerged were terms or phrases that were used by nearly every interviewee as they discussed their experiences with text messaging in the classroom. I also used a software program called ATLAS.ti to assist with the management of qualitative analysis. Atlas.ti software is capable of interconnecting data in order to organize and code in multiple ways. The Atlas.ti function, called "word cruncher" by the software, displayed word frequencies used during student interviews. I was also able to use the word cruncher to merge certain words together. After uploading all twenty-six transcribed interviews, I was then able to extrapolate the data in several ways. The only caveat here was when I saw how many times the word *like* was used. I was "like astounded," only to remember how often a teenager says "like" as a filler. I played the audios from all of the classes listening to what students said as well as what they did not say; listening for who was talking and who was not. I reflected on how I was using the text messaging to elicit conversations and how I might change it to evoke even more. I read and re-read student text messages and DISCO conversations, again looking for what was being said, who was contributing

and who was silent. I compared test answers to text messages and test answers to traditional work. I referred back to my journal and answered questions that I had noted to myself. From these activities, five themes emerged as dominant and prevailing: ease of use, depth of learning, meaningfulness of feedback, sense of challenge, and enhanced classroom conversation.

The student texts in the following sections are transcribed just as they appear and the quotes from the interviews are as they sounded; therefore the mistakes were not corrected in an effort to portray an accurate representation of teenage talk and text.

Ease of use

The most used word, besides *like*, throughout the interviews was *easy*. I had already heard comments in the classroom from students, so I was not surprised that the combination of *easy*, *easier* and *simpler* was used a total of fifty-four times, which indicates that most students said it more than once yet most students used the word in two distinctly different ways. During the course of my interviews I continually heard participants make claims that a texting assignment was *easy*. The word easy was most often made through a wide toothy grin as if they were getting away with something because I had made the task too *easy*. In one instance students meant that texting made it *easy* to transmit the assignment; it was *easy* to get the assignment finished. The theme *easy* was quickly identified.

"Because it's easier, I can send it whenever I want and I don't forget because I usually have my phone with me."

"It's faster and it saves time and you want to get stuff done."

"I liked it, it helped me get my stuff turned in."

"I loved it, it was so fast and easy."

The technology is engaging, and captivating and teens are so adept at using their cell phones that they equated their use with "easy." The difficulty of the question was not easier but students understood if they could use their cell phone it would be easy to get finished with their homework. The fact that cell phones are at their disposal and they already possess the skill to use them comfortably meant they could easily participate. The premise that the assignment was easy was relative to its context for learning (Lave & Wenger, 1991).

"We wake up with it beside us."

"It's in my pocket and with me at all times."

"It's easier to just flip out your phone."

"My whole life is on my phone."

The technology used inside the classroom should be as easy to manipulate and work as what they find outside the classroom (Camplese, 2008). The ease with which

students were able to text message was a motivator to engage with the coursework. Learning could therefore take place in various time frames (hooks, 2003) that fit with their schedules and preferences.

A second definition of *easy* was used by students to describe the process of thought generation. Teaching within the zone of proximal development (Vygotsky, 1978) should result in the most effortless form of learning. Students expressed the feeling that their thoughts flowed while texting, something that doesn't happen when they write. Work was turned into play and they approached the lesson with a different mindset (Langer, 1998) than they would have with a traditional worksheet.

"It made it a lot easier, where if I would have wrote [sic] the answer I probably wouldn't have got it as good. So, I really enjoyed that part."

"*Because it was just easier*, because I do it most of the time. *It's just easier* than getting a piece of paper and pencil."

These digital natives take ubiquitous computing for granted. They are wired in a way that enables them to automatically go to their devices to produce an outcome where those who are not native to the digital world still rely on paper, pencil, and books (Prensky, 2001). They were energized by this activity that they enjoy, therefore holding their attention for longer periods of time and enhancing their performance (Langer, 1998).

"It was easier…I can text waaay [sic] faster than I can write; and that way I can finish my thoughts better. With texting I can do it while I'm thinking."

"*Because it's easier* to put your thoughts in a text."

"Texting made me have *a more fluid answer*."

"It's easier for one, and I feel like if I'm texting something it's going to stay in my brain longer. *It's easier for me* to memorize text messages than things on paper."

"*Because it's easier* and I explain my answer better whenever I text."

Students are inundated with information and it is easy to get. Knowing where to get it and having the ability to manipulate it becomes of prime importance (Fosnot, 1989). Students live in a world where they can get information at the touch of button; they can submit payments electronically, and as they watch the news they read a running script at the bottom of the screen as if the newscaster may not be providing enough. They play video games with people who live across the country and work within the actions of four players shown on one screen, they can instantly send a text message and they can do all of this simultaneously. Then they go to school and their digital world is out of step with the linear processes they find in the classrooms. Nothing in school is like their world outside of school; the tools are not the same, the stimulation is not the same and it certainly is not easy. Students were able to take this tool (text messaging) and incorporate it into a practice that was useful, meaningful (Lave & Wenger, 1991) and seemingly easy.

Depth of learning

Learning was an essential piece of this study. The goal was to increase classroom conversation thus helping students learn. I wanted to know that if they had the perception of learning while text messaging, hence the interview question asking if they could talk about an instance when they learned about a topic from texting. I heard in student answers that it was the texting that helped them generate the knowledge. The ATLAS.ti word cruncher counted the words *learn* or *learned* thirty five times. Along this same line were the words *help, helped,* or *helpful*, which were counted forty two times. I initially had help and learn as two separate codes then had help as a subcategory (Hsieh & Shannon, 2005) but as I looked at the quotes from the student interviews, I decided to merge the two as their meanings became intertwined. Participant answers reflected the idea that by texting they received more help, as if the act of texting rather than their thought processes was the key to gaining the knowledge. "It" in these quotes refers to the act of texting.

"I know it *definitely helped me understand* the topics more."

"*it helped you* get more into the question."

"…it made me think about the subject more and maybe *learn a little bit more* from it."

"I think I learned more because we would actually do it and then you would put it on the test, it would be just like a review."

I listened again and surmised from these interview snippets that they believed that because they were involved in "it", they learned. The simple fact that they could use their cell phones for school purposes enticed them to engage. Learning takes place in a participation framework (Lave &Wenger, 1991) and "unfolds in opportunities for engagement in practice" (p. 93). The line in the above quote "we would actually do it" is referring to this student choosing to engage with the lesson. Teachers give students opportunities to learn everyday but it is the student here who is realizing that he took advantage of that opportunity when otherwise he may not.

The next few quotes are referring to using the DISCO chat application that allowed them to see the answers of their classmates and participate when and if they chose. During class, students were asked a question and then instructed to answer and respond to a fellow classmate. This application remained active even outside of the classroom and students could initiate a chat text discussion without me by simply sending a text. According to Lave & Wenger's (1991) situated learning theory, all of the students participating in the DISCO chat were apprentices or newcomers, meaning they had little or no experience and had put themselves in position to learn from others. Some were more capable than others yet the DISCO application provided practice to grow and move closer to full participation, which is a condition for effective learning (Lave & Wenger, 1991). During this session, I observed several students either without phones or in possession of a "dinosaur" (an old phone with limited capabilities) choosing to share with another. Initially, I noted this as a limitation but what I observed only minutes later was

that the act of sharing phones fueled several small oral conversations about the text conversation that was also happening. What started out as a silent activity, with heads down and thumbs flying, evolved into a productive yet somewhat chaotic classroom conversation whereby some chose to talk, others listened and still others continued to text.

"*I think that it helped* too because the kids who really didn't know what was going on could go back and look at the chat room and *it kinda helped them kinda understand."*

"helps them *learn in a better, a different way* than they ever have before."

"it made you *understand more* of what was going on."

"*It helped me learn* because it like put thoughts into your head"

"…because it allows for stuff outside the classroom and *they learn more from it."*

They were acting in their social world and within the context of the class. Lave and Wenger (1991) say that where this engagement is sustained, learning will occur. Talking about, listening to and reading the opinions of others were all implicated in increasing participation. Students had opportunities to engage in the conversation in a variety of ways; most acting within their comfort zones, minimizing the problem of access. Most classroom activities provide only one mode of learning which curtails a student's (an apprentice's) access to the full range of activities, and very likely the possibility for

learning (Becker, 1972). Instead of learning being an individual process separated from the outside world, DISCO placed it in the context of lived experience of participation in the world (Wenger, 1998).

"I felt like I *got more* out of it"

"…*it helped* the kids be more involved."

The text messages acted as a doorway to growing involvement in class. Students could exist on the periphery of class, safely, before jumping in as a full participant (Lave & Wenger, 1991). In addition, bell hooks (2003) challenges educators to use a diversity of techniques to convey information so that the spaces of learning are opened to be more inclusive. The DISCO experiment and the individual text messaging apparently opened those spaces for many students.

"…and then I know the answer."

Meaningfulness of feedback

The theme of learning segues into the theme of *feedback*. Or should it be the other way around? Students reported learning more when feedback was part of the equation.

"You kept texting me back…and *it made me think*, like…how did it actually affect other countries? …and it made me think, oh, outside the United States, what may have happened? So I think *I learned a little more just thinking about that*."

"I liked it…because I would have just turned it in and *you wouldn't have kept asking me those questions."*

Traditional feedback is a slow arduous process, or worse yet, a nonentity. When a student turns in an assignment it sits in a folder until I have the time or inclination to grade it. When I finally get around to it, I put a subjective grade on it, enter it in the grade book and done, that's all. I often comment on a student's work but never does the student correct or add or revise and turn it back in unless I withhold a grade until they do. The fable of Sisyphus teaches us that without feedback we are certain to repeat our mistakes (Camus & O'Brien, 1975). Feedback clarifies expectations, encourages dialogue and increases self-esteem (Nicol & MacFarlane-, 2006). Timeliness is one of the most highly regarded aspects to feedback (Chickering & Gamson, 1987; Choy, McNickle & Clayton, 2009; McTighe & O'Connor, 2005) along with relevance to the needs of the learner (Chickering & Gamson, 1987). The use of text messaging between teacher and student was simplified and manageable; feedback was quick and the revisions were done quickly, and without the promise of a grade. Most importantly, the feedback was given before an assessment. With school schedules often students do not even see their completed assignments before an assessment. This was a valuable lesson learned by this teacher researcher: meaningful feedback is important to student learning.

"It made me *think and come up with a better answer*."

"…cuz if you turned it in then you only got a check and maybe a reply on paper if there is something wrong, but texting you *actually asked like more for an answer*."

"*We actually talked to each other*, instead of just putting in an answer and getting a check mark back or something."

Learning ends when an assignment has been completed and right answers were the goal. There is no conflict or confusion. With feedback I could create conflict or confusion and this disequilibrium led to an understanding that had breadth, depth, and a sense of value (Fosnot, 1989). In these student remarks I heard appreciation and a desire to put more action into their work.

"I wouldn't have thought more into it, I would have just been like, oh answer textbook style."

"Like I really didn't get it all because I just read the thing and I was like well this sounds good to me, and when I sent it to you, you said go back and read his Proclamation and tell me about it. So I read it and sent that to you and *it helped me understand* basically what the whole thing was about. I like knowing what I need to focus on, like not everything but this particular thing."

"Like whenever we do texting and you text back, *we talk more about it* and stuff."

"Like if I just turned it in on a piece of paper, you weren't able to get me to think more, but since we were texting and actually having a conversation over the subject, right then and there, it *actually challenged me to think further*."

"It made me think about things for sure, if I was writing things down I would just turn it in and *there wouldn't be that deeper thinking*."

Me: "What made you think about it differently?"

"Just having the direction to do it."

Just having the direction to do it; so telling. These comments on texting and feedback made me realize how I was a different teacher through a text than I was on paper. With a traditional response, I merely pointed out mistakes but through texting I was asking them for changes. I was, "actually asking like more for an answer." When school is routinized and knowledge is simply distributed students will almost never pose questions, they won't challenge information; they just let it pour into their heads. They haven't been asked to think, to really think. It's so easy not to, and traditional methods were not demanding it. I could not get my job done fast enough to provide the feedback that they needed to go a step further in their thinking. Reality consists of problem situations and experience is conceived as a kind of problem solving (Lave & Wenger, 1991). Feedback presented the problems and the solving of them provided the experience.

When they did not understand the question they just got it wrong and without feedback we went on, without any proposition to fix it.

Duckworth (2006) writes, "the right question at the right time can move children to peaks in their thinking that result in significant steps forward and real intellectual excitement" (p. 5). All of this feedback and additional work I was asking them to do, on their own time, was a positive for them. I don't know if they realized this at first, but eventually they caught on and I heard them say, "I'd just get a checkmark." Which meant it was the same grade without having to respond, but what I heard from many of the research participants was that the extra work did not matter; they wanted to do better, know more, and think more. Listen as they speak of confidence and understanding.

"I felt confident about it, *mainly on the ones where there was feedback*, not just me sending one but you saying something back…"

"…like you would kinda *prod an answer out of me*."

"I liked it because I felt like we were able to get what, *get an understanding* of what you were really wanting."

"I liked it because you're the one who actually gives the test so you are looking for a certain thing so that whenever we have the test *we will be able to answer it* how you want it to be answered."

"Knowledge is in continuous production as dialogue ensues" (Gergen, 2009, p. 30). As long as we were texting they continued to learn and I will go further with my assumptions to hypothesize that the thinking continued as new spaces were opened up for them to imagine. These new spaces were opened as the interaction affected the student's thinking processes. The dialogue through texting was cognitively more demanding (Cazden, 2001) yet they had turned their work into play and become mindful learners (Langer, 1997). This inquiry through dialogue is vital to the growth of a student's intellect (Vivalis & Vivalis, 2004) while helping them build empathy, understanding and respect for the opinions of others (Ketch, 2005). Through the lens of situated learning theory the feedback dialogue fulfilled several functions: engaging, focusing, and shifting attention, bringing about coordination and support for memory and reflection (Lave & Wenger, 1991).

Sense of challenge

Most research participants began their interviews expressing their love for texting because it made the completion of assignments easy. But eventually most also discussed the notion of being challenged. The dichotomy of these two words is interesting; which was it? Easy or challenging?

"I would look up more stuff *and get more into it."*

"It was like something more; maybe so it would make me *think a little more*."

"I just had to *think more* about the subject."

Being challenged fits into Lave and Wenger's (1991) notion of apprenticeship. An apprentice as defined in situated learning theory remains in its traditional sense yet as the theory has evolved so has the definition to include many forms of a learner who is acting within a community. For an apprentice, the character of learning and work practices cannot be divided. Vygotsky (as cited in Coffey, 2009) is also appropriate to mention here along with situated learning theory. The zone of proximal development is the gap between what a learner has already mastered (the initial text) and what he or she can achieve when provided with educational support (the feedback, the prodding and the additional questions). The concepts behind the zone of proximal development and apprenticeship "help to make obvious the social nature of learning and knowing" (Lave & Wenger, 1991, p 61).

"I started to *think more and then figure out* what I needed to add."

"…so it would make me *think a little more*."

"Social interaction is the basis for cognitive growth. Communication that transpires in a social setting with a more knowledgeable or proficient person (sometimes that was me but at other times it might be a classmate) assists children in building an understanding of the concept" (Coffey, 2009). In the classroom, the teacher is responsible for structuring interactions and developing instruction in small steps based on tasks the

learner is already capable of performing independently. This is referred to as scaffolding (Vygotsky, 1978).

"I kind a got in a panic but then I was just alright, *let's do this*."

"…cuz I was like, I had a good answer, oh no, *not good enough*."

"I felt pressured, I didn't really know how to answer it, I didn't want to say something wrong, so I would look up more stuff and get more into it. *I learned more*."

"But then I started reading in my book…"

"…*but then I had to think*…"

I was able to challenge, individually, without causing frustration (Coffey, 2009), which led to enhanced motivation increasing their knowledge so that they could improve on their initial answers. The relationship between situated learning theory and the zone of proximal development requires some discussion of legitimate peripheral participation. "The mastery of knowledge requires newcomers in the socio-cultural practices of the community" (Lave & Wenger, 1991, p. 29). A person's intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a socio-cultural practice. The zone, according to Vygotsky (as cited by Coffey, 2009), focuses attention on the relation between instruction and development. A teacher must cover the distance between the actual development level and the level of

potential development through problem solving under the adult guidance or in collaboration with peers.

"Well, I think *it helped me learn more* because I usually learn better if I'm kinda *challenged* with it."

"I felt like you *challenged me more*."

This sense of challenge is consistent with Vygotsky (1978) as he writes, "What the child is able to do in collaboration today he will be able to do independently tomorrow" (p. 86). Or using the words of Lave and Wenger (1991), he or she will become a full participant.

Enhanced classroom conversation

As I have mentioned many times, getting kids to engage in classroom conversation was the initial and central focus of my research. I knew that my students could benefit from a shared understanding of the topic if they would discuss their personal experiences with problem solving (Wenger 1998) so I was striving to understand the reasons for their lack of talk. When affective conditions are not optimal or the student is anxious a mental block will prevent the input from reaching those parts of the brain that are responsible for language acquisition (Krashen & Terrell, 1983). Participants spoke particularly of two stressors that inhibited them from talking: the fear of a less than perfect performance and the possible negative reactions of others. This theme of talk has two parts based on my two successive questions: Why don't they? and then, Why did

they? The following are excerpts from interviews supplying reasoning to their lack of talk in the classroom.

"Well, *some people aren't good speakers*."

"I get stuck up on what I was thinking *and I forget what I'm trying to say*."

"I never really know anything about history."

This fear of a poor performance was tied to their reluctance to talk and they were apprehensive. Students who haven't yet mastered how to "do" school (Scribner & Cole, 1981) are inhibited by their inadequacies and therefore chose to remain quiet during class discussions. They have had little opportunity to practice thinking strategies or show evidence of their development orally (Ketch, 2005) so when the opportunity did arise they reacted with silence.

I don't talk in class, "because everyone already has their own opinions."

"*I just don't like to talk in class,* everyone automatically judges me for what my thoughts are."

"The only opinion in first hour is Rebecca's."

These voices identified concerns of fear and power relations that seem as though they had been established long before World History class. These issues that quiet students shared lead to what is essentially self censorship reducing their chances for

learning opportunities. Situated learning theory (Lave & Wenger, 1991) recognizes that social actors are embedded in space and time and do respond to specific situations. The response in the case of these participants was to disengage which obviously decreases the potential for learning. When a student shuts down in response to feelings of fear or power the result is a decline in learning chances (Mutch et al., 2006). Classrooms will always have potential for conflict, power differentials and struggles for control and students do not usually attempt to cross those boundaries (Fox, 2000). These student comments give us a glimpse of the decision making process in why they do not attempt to cross, expressing a multitude of valid reservations: fear of judgment, fear of failure, and fear of how the power structures might have an effect if one speaks out. "Teacher talk and student talk are essential components that determine the quality of learning in the classroom. Language is an everyday, every minute matter and nuances of inflection, tone, modulation, and vocabulary are constantly at play in the interaction in the classroom" (Delpit & Dowdy, 2002, p. 148). What was I doing to hinder their speaking and how was I contributing to the little amount of talk happening in my classroom? Did I make them fear giving a wrong answer? Did they fear my response? Could texting aid in overcoming those fears? The next segment listens for the explanation behind the increased classroom talk.

" cuz *I was prepared* and I didn't have to be like oh I don't know this, I can actually talk. *I talked more* than I would have, yeah."

"because *I remembered* what I texted"

"You kinda knew what path you had chosen, you *already had an idea* of what we were going to talk about and it made it simpler."

"I didn't remember so I went back through my phone and *I talked a little bit more."*

"…cuz *I was prepared*."

"*I felt a lot more confident* saying what I thought the answer was."

"*I had the answer* right there (pointing to his head) I knew what I had put"

"I felt pretty good because if we didn't get the text exactly right you helped us try to find the right answer, and *then I felt good about talking*."

Cazden (2001) says it is speech that brings the cognitive and the social together, that it is through speech that students put their new knowledge into their existing knowledge. The teacher's role is to set the stage for possible communication because it is central for students to demonstrate what they know in order to enhance the purposes of education. It is up to the teacher, and in my case everything that I had tried, had failed…except for texting. Texting allowed students to set themselves up to demonstrate what they knew. As one student commented, "It kind of gave me more insight to how, to

uh…get my point across in class and make what I was trying to say more understandable."

"Yeah, since I, we, had already put more thought into it, *I knew what I was talking about* and so had a lot of other people, so there was *a lot more discussion* about things."

"Yeah, so with that, I was able to put down my thoughts and *form my thoughts before I talked*, if that makes sense."

The less stress, the more easily talk is accomplished (Delpit & Dowdy, 2002). "Shared participation is the stage on which the old and the new, the known and the unknown, the established and the hopeful, act out their differences and discover commonalities, manifest their fear for one another, and come to terms with their need for one another" (Lave & Wenger, 1991, p. 116). Students perceived that text messages prior to class discussions enhanced the conversation.

"*More people talked* and gave their opinion."

"It actually got like *conversations."*

"It got people to *talk more."*

"It might allow them to *voice their opinion* a little more."

"It helped everyone because then like everybody kind of had their own opinion but they also knew what was going on so by doing that it wasn't like just one person that

was doing it because by us texting you it *gives you the opportunity* to know we are actually doing our work."

"You actually *know what you are talking about* and *you get heard*, like you get heard on texting because there's just two people but when you *talk out loud* like everybody else has *to hear your point of view* too. It was better because you really know what you're talking about and you know it well, then *you can just get your opinion out there."*

"*We talked about our views* on a topic and we *kinda got a little debating* in there."

The classroom, before we started using text messaging, was emblematic of the ways that schools contribute to the silencing of diverse opinions and the reproduction of inequalities even when it is unintentional (Fine & Weis, 2003). The use of text messaging invited students to practice, engage in and value a more democratic environment, and producing therefore more classroom conversation.

DISCO

This is an example of a DISCO conversation that took place in the evening, about a week before the final comprehensive exam, at 8:20 p.m.:

Me: Which came first? Islam or Christianity
SA: Islam!
DH: Islam!
Shane: Christianity
JN: Islam
SA: I mean Christianity :=)

SJ: Christianity and Muslim
BL: Christianity
SJ: I mean Islam
Shane: Lol I know I'm right.
Seth: Christianity. (who cares?)
BL: Me too cause muhammad said that jesus was a prophet
Shane: Exactly
SJ: See I'm right
Shane: That's how I knew too
JN: nay dat aint me!
SJ: Who's right Ms. Resler?
JN: erbody!
Shane: Christianity is older by about 600 years, SJ.
Shane: erbody …in the club?
Me: BL and Shane, Muslims believed that Jesus was a prophet but that Muhammad is the last true prophet. CH, you care bc it's on the test
SA: yeah, google it
JN: Yes sir!
SJ: But in Islam it's almost the same they also have Adam and Eve
Seth: Oh, that's right. Whoops
Shane: HA! Boom! It's over SJ. Good Job Baby Face. We got 'em.
BH: Picked up my phone 25 messages. Thanks guys!
SJ: What, I dont think your right Shane.
Shane: The teacher just said I was right SJ? That's all I need. I'm right. Shut up.
Callie: Chrisitianity
9:35 pm
CF: Aww, I was roping. I missed all the fun. I agree with Shane
Melissa: I was roping too, dang… Agreed
DH: I broke my rope
CF: Did ya catch any Melissa?
Melissa: Heck yeah I did CF. Did you?
CF: Oh ya! Dogged me some steers too! Got a little dirty but it'll be all right
Me: DH your rope is frayed…at both ends
Melissa: Yeah I feel ya man…but its all worth it at the end of the day, right?
Melissa: Dang DH
CF: Oh ya Melissa lol
Seth: I am trying to sleep, people. Phone is going off…
9:45 pm
DH: I don't think so, there still 5 cattle out and I got a snake in my boot.
DH: Who goes to bed this early?
SA: Goodnight!

CF: Mrs Reslers going off on DH
Melissa: Crap…Sounds like you shoulda had a VB D- man.
DH: I think imma need a v10 to get through the night.
Seth: Z z z…
Melissa: I feel ya bro…
Me: It's over a 10 or I'm throwing our another question
DH: Ha ha hit me, I got this
CF: Yes ma'am

There are several issues that can be pulled out of this one DISCO exchange that took place from 8:20 p.m. to 9:45 p.m. First and foremost, students will participate in school on their own time. This conversation incorporated about half of the total class. There were no points promised or even discussed and no initiation except for the random question. Secondly, students validated their answers with a fact and even one Googled it and let us know that is how she knew. The students who were right cheered and congratulated themselves showing that they do hold some value for knowledge. Of the ten students involved in just this one question, eight of the ten put Christianity before Islam on a chronology question of world religions. Of the two that missed it, one was a student who was only involved in the chat after the question was answered and the other was SA who changed her answer but then Googled it. (I can't explain that!)

These students knew that everything they sent could be seen by me, but were comfortable in some playful banter with each other, as well as with me. The fact that the interaction was fun, even if initially about school work, kept their attention. I saw also, the potential for the same problems that silences students in the classroom: power and domination. When Shane was patting himself on the back he told SJ to "shut up." SJ

never joined back in the conversation, although he did re-engage the following day when I played with this same exercise during class. Shane was absent and did not include himself.

I was beginning to see that not only were students beginning to use text messaging more broadly for classroom purposes, their classroom conversation was increasing as well. Conversation became an extension of their texting; the interaction might begin with a text but then flow into discussion.

Listening to seven special voices

These are the stories of seven students who shared a particular special experience with me. They are different from one another in terms of their popularity ranks, their academic abilities and their socioeconomic statuses, but they are the same in one aspect: they are all texters. They all tell a similar yet different story. Each has a unique perspective about texting messaging in the classroom and why it was positive for them. When I began this study I was solely interested in how to create more and better classroom conversations. I was persistent in providing feedback, saving every text message and journaling after every class. I listened to audio tapes of my classroom trying to capture the changes in the conversation; but the study revealed so much more than that, and these stories are those revelations. These seven will tell us about their individual experiences with classroom conversation and texting but they will also share their exceptional interpretations of how texting affected them in other ways. You have heard several lines from these Seven already because they overlapped into other themes, but

these stories throw their words into different categories. As I previously indicated, my analysis of content was directed which provided predictions for the codes (McTavish & Pirro, 1990) of ease of use, depth of learning, meaningfulness of feedback, sense of challenge, and enhanced classroom conversation. I chose these seven based on certain aspects from their interviews that went beyond the initial codes. These seven made me sit up and listen just a little bit more closely.

Melissa: The voice of empowerment

Melissa is a popular student who has no problem letting everyone else know what she is thinking, especially if it's about your shoes. Her family owns a local business and she is vocal and adamant about the fact that she has to keep her four point GPA . She treats the halls of the school as her personal runway. Melissa rushes in most days apparently expecting teachers and classmates to be thankful that she took time out of her busy schedule to make it to class.

I began all the interviews with the same question, "When you had the opportunity to text or to write, what did you choose?" As I expected Melissa said that she "did texting, because I'm quicker and it keeps my attention better, I get bored when I'm writing but not when I'm on my phone so much." And when I asked her about my responding to her initial text she said, "I liked it better, it helped me a lot. You would kinda prod an answer out of me and I don't know, it just sorta clicked in my brain in several different ways so I remembered it better. I felt like my answers were a lot more intelligent over text, I don't know formed better, I guess."

I asked Melissa to discuss her thoughts on how texting might have affected her willingness or her ability to talk in class after we had a text conversation. “I felt more confident about it, mainly on the ones where there was feedback, not just me sending one but you saying something back I felt a lot more confident saying what I thought the answer was rather than just writing it down.”

“And what about overall in our whole class, do you think if affected our conversations in class?”

“ …I felt like we had a lot more intelligent conversations and there were more responses instead of just a few people who are always talking, it was more so everyone who had an opinion, so…”

During our lesson on communism, Melissa and I held a fairly lengthy text conversation about whether or not a society could ever really become classless. She texted, “If by some strange event, a society became classless I guess it would be possible but I don’t think that it will abolish the ruling class’s supremacy because no matter what, society will always have the upper and the lower class no matter how its established. Either way, it WILL be established.”

I wanted more from this thinker and prodded her to discuss her reasoning behind thinking there would always be classes if everyone was politically and economically equal.

"I think with how people are, they will find some grading scale or deciding factor that makes one group of people superior to the other. People are always wanting to prove why they're better in society, its just human nature even though its terrible."

"Good thoughts," I texted. "So maybe even though we make the same amount of money and our houses are the same, my eyes are green and yours are brown, so I am superior?"

"Exactly," Melissa responded. "I bet it would go back to skin color. It would be like it used to be—white are better than blacks—except the only difference is skin color rather than education or money."

Melissa's interview was pretty normal up to this point; most students articulated these same thoughts about ease of thinking and transmission. But, when I asked Melissa how she felt about sending a text to her teacher she opened up a new point of view. She said that she was actually more comfortable sending a text, like we had a "more open relationship. It made me feel like we were on a better setting and we weren't so much teacher/student but more like…you know. I feel like I work better, I'm not just like you have to do this right now, you know its weird."

I asked her if she felt like it gave her more freedom and she responded with, "I feel like an adult, like I can be trusted with my device instead of treated like a child. I use my calculator and the internet a lot. I put everything on my calendar; I put my whole life on my phone."

"The function of a certain tool is dependent on how it is made sense of and incorporated into meaningful human practices" (Lave & Wenger, 1991, p. 102) and an empowered learner is an autonomous, inquisitive thinker who questions, investigates and reasons (Fosnot, 1989). Melissa owned this tool, that her "whole life is on," regardless of what it is. She had made it meaningful. My acceptance of its use was potent and gave her a sense of empowerment.

Shane: The voice of ownership

Shane is a likable kid, in a messy sort of way. He has a wonderful personality and is intelligent but is a constant aggravation because he is continually teetering on that line between passing and failing. He and his single parent live alone and his casual comments indicate he enjoys a lot of personal freedom. He is friends with a variety of students but mostly jocks, although he himself is not one. He is their biggest fan but does not participate in any school activity. As his teacher, I know that he is capable of performing any task that I give him but he chooses not to do the work or even sometimes does the work but it's just not that important to turn it in. He has no problems with verbalizing his opinions in class.

On talking in class Shane didn't think that the texting affected him much "I feel like I would have talked as much in class as I did before." But he did say that he could remember what he had texted "cus I remember it because it's a text and then I know the answer because you would tell me if it was like correct beforehand and then I know the answer."

Shane was working on a power point over Dante's *Divine Comedy* and texted me a question. I had seen his progress so far and was not very impressed so I gave him some interesting bits on Dante's Inferno and the Nine Circles of Hell to see if I could spur his interest a little and encourage him to create a better, more interesting power point.

"You kept asking me questions and making me elaborate."

He could have been finished with the question, yet I prompted him over a text to expand his answer. Shane's response to this interview question was particularly insightful. "It actually helped out a lot, it made it feel like it was my genuine thoughts rather than something just coming out of a book, because you had to elaborate on the topic."

Shane's experience was positive because it was in the context of a meaningfully structured situation (Arnseth, 2008). Shane had an opportunity to be real and it became meaningful for him. Shane had shown me that work simply copied out of a book is not valuable, but when he had ownership, it was "genuine."

Callie: The voice of individualized instruction

Callie is a cowgirl. She has brown hair that reaches down her back. She either ties her mane in a braid or lets it flow in an unstylish manner. She wears western clothes most days, and is a member of the school's rodeo team. She is also a member of the softball team but does not see any playing time during games nor does she run with the rest of the team members. She lives with her mother, who quietly attends the games and then takes

her home. She is a C student academically, but her hard work usually earns her a B. She is very quiet in class, neither making comments nor asking questions. She will answer a question in class but never with any conviction or even much volume. An interesting fact that I know about Callie is that her mother took her to a tryout in Tulsa, over a three-hour drive, for a part in a western movie. In her words, they were looking to cast a wholesome looking, all American Girl. Although she fits the description of wholesome looking, she didn't get the part.

When asking Callie about using her cell phone for school she said "it was kinda weird to actually have the acceptance of the teacher to let it be out, to actually use it." She hesitated at first thinking that I was tricking them, that if she fell for it and got it out that I was going to send her to the office. I asked Callie how she felt when I gave her feedback from a text and actually engaged her in conversation. "I felt like you challenged me more. Like, if I just turned it on a piece of paper, you weren't able to get me to think more, but since we were texting and actually having a conversation over the subject right then and there it actually challenged me to think more."

When the subject of classroom conversation came up, Callie got quiet. "I think texting helped me share it, (opinion) I mean I don't know if it got to the whole class, I mean I know it got to you, to where you could hear my own opinion and it was better for you to hear it then have everyone else hear it and automatically judge me for what my thoughts were."

I asked her if that is why she doesn't talk in class, because she thinks people will judge her. Callie nodded her head yes. I asked her then what she thought might make her talk more in class and she said, "Nothing…I just don't like to talk in class. I just sometimes like listening to everybody else… I don't judge anybody else, I just, I'll think deeper on their opinions and stuff. I just feel that when I talk they think…"

"They are judging you?"

"yeah"

"So," I say to Callie, "did you enjoy expressing your opinions?"

Another "yes" nod.

I asked her if she remembered a particular conversation that we had over communism and religion, wondering if she would have brought the subject up in class. "No, because I'm a shy person and I don't like to talk out loud."

I didn't bring up religion in communism because of its controversial nature but she and I had talked at length about it. The text message that prompted the following text discussion was: Do you agree with Marx's definition of political power? Do you think that a state could ever truly become classless?

Callie: Yes, because its a group of people that have joined togther [sic] [sic] to achevie [sic] the same goals that will help them achevie [sic] a better life. 2. No, there will never be a classles [sic] society because it is basic human

surviavl tht [sic]some will do better than others.

Me: Good thought- so it's human nature that keeps communism from working?

Callie: I believe so

Me: Would it be good for people if it did work?

Callie: If it worked correctly it wouldn't be awful. Everybody would have to be on the same page for it to work

Me: So the humans involved would have to agree to let it work? Could a ruler make it work?

Callie: Yes. No rulers are single minded people who only care for their wants rather than the needs of the people

Me: All of them?

Callie: I think so I mean american [sic] presidents arnt suppost [sic] to but in the end they will sacrfucie [sic] us

Me: For their own gain?

Callie: Yes

Me: Then no one is wealthier than anyone else. So hypothetically no one should want anything more and crime would go down. Everyone again hypothetically will want to work for the good of their state. So yeah if everything works out like its supposed to and if people werent [sic] selfish and worried about givin [sic]

away their freedom of being able to get wealthy, then yeah everyone would live happily.

Callie: I do agree I think there would be more peace if everyone could except [sic] it then possiably [sic] there would be more products for every one and we would have less crime and less homeless people. But what about religion? Would we still have tht [sic] fight or would everyone except [sic] it

Me: Good question-I'm not sure that Karl Marx was an atheist but he did have a lot of criticism of it. He said that religion was an opiate for the masses. What do you think he meant by that?

He also said, "religion is the sigh of the oppressed people"

Me: Sorry, of the oppressed creature

Callie: I think he meant tht [sic] the oppressed will have some kinda of faith if not in the government then in their god

Me: Yes, just like opium soothes pain if you are physically hurt, people suffering from economic conditions can look forward to a future (heaven) without pain

Callie: Yes

Me: So now what do you think? If there was no more class struggle, would we still fight about religion?

Callie: Even in all this harmony there will be something tht [sic] people will want to fight about whether it be religion or human imperfections. But yes we probly [sic] would still figt [sic] about religion

Me: But would there be a need for it? We have what we need and we aren't suffering from our economic conditions

Callie: No there would be no need for it but it is human natue [sic] to fight over something and religious group hav raticls tht [sic] are gonna giv [sic] their religion a bad name and cause conflict between others

Callie: What is a world without a little entertianment [sic]

Me: Easy, peaceful?

Callie: Yet boring

Callie's experience fits into situated learning theory's notions of apprenticeship. She was able to take steps, little by little, to begin to share her thoughts and opinions. Although she never fully became engaged in a classroom conversation she did share her thoughts through a DISCO session. I believe that with time she would fully participate because the small steps, along with one-on-one participation with me, will lead her out of the social relations she perceives as judgmental. These experiences minimize her perceived risks of failure. Callie was embedded in a social situation existing within her classroom trying to manage it, act within it and potentially transform it (Lave & Wenger, 1991). Situated learning theory allows for the interpretation of the relationship between agency and structure (Kakavelakis & Edwards, 2011). Callie teaches us lessons in individualized instruction. Traditionally the teacher determines what is taught or she adheres to a fixed agenda (von Glaserfeld, 1989) but Callie decided what she wanted to

learn and text messaging allowed Callie the opportunity to transform her situation in order to pursue her interest in religion and communism. She indicated that she would not have brought this up or asked questions in class because religion is "a big thing for people." With the ways that schools are structured, staying after class to have a discussion with a teacher is not the norm, but texting created an avenue for questions, conversation and thinking. She was my apprentice but also acting within the entire community, her participation is evolving and her relations changing (Lave & Wenger, 1991). In a constructivist classroom the teacher and the student work together to decide on issues of study that might allow for significant student engagement. The role of the student is enlarged in order to shape the direction of his or her study (Brooks & Brooks, 1999).

Valerie: The voice of student centered learning

Valerie is an A student, a member of the student council, a class officer, and athlete. She is of average means and lives with her brother and both parents. Valerie is thought of by her peers as "smart" but does very little talking in class. She reminds us in her interview "… I'm not the best at speaking my mind."

When asked why she chose texting over writing a traditional answer she said, "I can text waaay [sic] faster than I can write…and that way I can finish my thoughts better. Because when I'm writing, since it takes awhile, I forget what I was going to say next, but with texting I can do it while I'm thinking."

I wondered how this A student felt when I would respond to her answer and give her an opportunity to respond. “It made me think about things for sure, if I was writing things down I would just turn it in and there wouldn’t be that deeper thinking. I guess. I would say that with everything I texted I put more thought into it.”

Since talking in class wasn’t Valerie’s favorite thing to do I asked her if she thought that texting had any effect on her classroom conversation. “Yeah, since I had already put more thought into it I knew what I was talking about and so had a lot of other people so there was a lot more discussion about things. Yeah, I was able to put down my thoughts and form my thoughts before I talked, if that makes sense.”

I chose Valerie to showcase for her thoughtful comments on class conversation but she also taught me a lesson about traditional (old school) teaching methods. I asked her to tell me her thoughts about seeing a question on a test that we had previously texted and she said, “I loved it, because I knew what I was talking about.”

“Why,” I asked, “I always put the essay topics on the study guide?”

“Well, let’s get real, people don’t use the study guide.”

How might Reconstruction have been different if Lincoln had survived?

Valerie’s **text** responses	Valerie’s **test** responses
Valerie: If President Lincoln hadn’t been assassinated then the punishment on the	Lincoln’s view on Reconstruction was very lenient. Lincoln gave people of the South a

south wouldn't have been as large. Lincoln wanted a smooth, peaceful Reconstruction. Lincoln had only three terms of his Proclamation of Amnesty and Reconstruction, none of which were harsh or not understandable. Me: Example of his terms Valerie: 1. He granted amnesty to southerners. 2. Ten Percent of the territory had to take the oath before they could apply to be part of the union. 3 Major contributors of the confederate cause were not allowed amnesty but could go through the court to try	pardon, unless they were main Confederate leaders. After 10% of the territory took an oath they could apply to be part of the union. Basically, things would have gone a lot smoother if Lincoln had lived.

"I wish other classes did this, I really do."

This example of Valerie's text answer juxtaposed with her test answer is a good example of the recall that she possessed with her text messages. She showed us that the knowledge that she generated was more powerful and valuable that any knowledge that had simply been passed on to her (Fosnot, 1989).

Seth: The voice of self-expression

Seth is a calm, gentle soul. He sits in the back of the room and a teacher may never know he is there except for the fact that his mother will remind you. He plays football, but again plays a very quiet role. He is an attractive, clean cut kid who is scared of the aggressive teenage girl. He is very polite and I'm sure he uses his manners at the dinner table. His work is neatly done and organized, if you looked at his handwriting you would assume it came from a girl. He was the student that indicated that he was going to bed during the earlier DISCO example. He was my first interview and I was pleasantly surprised by his articulation and thoughtfulness, I had heard so little from him in class.

"I did it in text, I opened it up, I would think about it, I would just use other people's opinions, kinda create my own, but I never wrote anything down, it would all just come out as my brain was processing it."

"Why did you do that instead of on paper?" I asked.

"Well.. I don't know, I feel that if I kinda talked it to myself, I feel if I kinda talked it out, the information goes better in my head, I don't know."

I asked how he felt about receiving credit for a text message that he sent.

"Cool, I would text every day."

"Even when I would text you back and say, 'give me more' how did you feel about that?"

"Ummm… I felt like I didn't explain enough at first and then I would add on. I was like, I started to think more, think about what I previously said, I would read my own text then figure out what I needed to add to that. I really didn't care about the text over civil disobedience, but after I got on the computer and looked it up, read a little bit and put my opinions with it I started to get a new look on it."

I knew that he had started to talk more in the classroom so I asked him about that experience.

"I kind of felt like expressing my opinion more, instead of just sitting back there and letting everyone else talk, not just not saying anything in class, I felt like I was more motivated to express my own opinion."

"What about everyone else?" I asked.

"Yeah, we got into you know what I mean, we talked about or views on a topic and we kinda got a little debating in there."

"Anything else, Seth, you want to tell me about your experience with texting in the classroom?"

"I liked it, I did feel like I was expressing my opinion on a topic more, that's what I liked about it."

Seth was able to participate in the community of the classroom. His points of view were heard and accepted increasing his interaction and inevitably making

conversation more valuable. As Seth begins to share more, his sense of identity escalates and he moves closer to becoming a full participant (Lave & Wenger, 1991).

Brandon: The voice of caring relationships

Brandon is from a wealthy farming and ranching family. He is a B student but struggles to maintain it. He is very involved in Future Farmers of America and sings in their honor choir. Brandon is accustomed to winning stock shows where he has the most prized animals. He spends a lot of time showing his livestock and misses quite a bit of class due to FFA activities. Brandon's family is grooming him to work with the family business so he buys and sells his own livestock and always has large amounts of money and a nice truck and is well liked by his peers.

Brandon always chose to text because "it seems like I was more…I don't really like writing down a whole lot and it seems like I could answer it better if I texted it, maybe, so it would make me think a little more, writing it on paper seems like I am just doing more school work, texting it made me think a little more about it, made me have a more fluid answer."

When I responded to Brandon's initial text he was somewhat taken aback. "At first I was like, crap, she texted me back I gotta respond again. I was kinda like oooooh, but then I had to think, it made me just kinda think about the subject more and maybe learn a little more from it."

This is what I call lighting a fire under someone. Sometimes it takes a getting a little uncomfortable with the heat before you ever get up and move. Brandon's comments about responding to a second text are revealing.

"ummm, well, it's kinda like I needed to respond back, I wanted to get a good grade and so it made think and then I came up with a better answer and I started thinking and one thing led to another and I kept on typing, kept on typing and it really made me understand that.

"So, Brandon, I asked, "how do you think texting affected your ability to talk or to verbalize your opinions?"

"ummm… I don't know, I think it maybe helped a little bit, because you kinda knew what you were thinking, kinda knew what path you had chosen, if you gave us two choices, like you already had an idea of what we were going to talk about and made it a little simpler."

Again, these are pretty standard answers. Many agreed that feedback made them think and using text allowed for a more fluid answer and that they felt more confident and prepared for a class discussion. Brandon's interview becomes special when I ask him how he felt about using his cell phone, in general, in the classroom.

"Just the fact that we're not supposed to text in school, that type of deal. But I really think this maybe helped the kids be more involved, answer maybe a little more.

Teachers are kind of like wondering why kids aren't doing so good, like they are always on their phones and this is a great way to get them to actually answer and have the teachers text them back makes them think, oh they do care, they want me to do good, and so the kids think or they research and reply back and it helps them in a better, a different way than they ever have before."

Brandon felt as if I cared about him and the others in the class through the act of a text message. He was enabled to participate in a range of conversations, with his teacher and with other students. Learning occurs through mutual exchange and coordination of participants (Brooks & Brooks, 1999). Brandon and I shared in the goal of learning and because of a relationship forged through texting he was willing to do a little more research in order to respond with a better answer. The small things often make big differences in student attitudes, not simply their feelings toward their teachers but toward what the teacher is teaching (Delpit & Dowdy, 2002)

Jonathon: The voice of disempowerment

Jonathon would rather not come to school at all. He is a senior in this sophomore level class and is perturbed about it. He is late most days and is very passive toward me (maybe because I have him first hour) but other teachers have described him as rude and hateful. I am unsure about Jonathon's home life but know that he has only attended this school for a year and a half. He does not participate in any activities but dates a preppy girl who is very involved in school life. He is content to maintain a C, could easily make an A, but is satisfied if his grade is a 59.5. "I just need the credit," he states.

Jonathon's revelations did not come to me through his interview but rather during a text conversation we had over communism and the possibility for a classless society. Again, there were two questions: 1. Do you agree with Marx's definition of political power? 2. Is a classless society realistic? The following was at 7:59 p.m.

> Jonathon: 1. I do agree, because the people with all the noce [sic] things the government wants can basically control it, for instance, oil in America.
>
> 2. I do think its [sic] realistic, depending on where at you live in the world and whether or not it is developed country or not.
>
> Me: So if it's an underdeveloped country it would be more realistic?
>
> Jonathon: Yes ma'am
>
> Me: Why not in a developed country
>
> Jonathon: Most developed countries have moved more to a democratic government
>
> [8:17 p.m.] Me: So in democratic government they can't eliminate classes?
>
> Jonathon: not without eliminating parts or systems inside their government. No matter where someone goes there's going to be poverty and riches…Now, in developed countries its [sic] quite a bit easier to change your "class" but to answer your question, no
>
> Me: Good thoughts
>
> Me: Clarify for me your number 1 answer – if you have what the govt wants you have control?
>
> Jonathon: Yes
>
> [8:30 p.m.] Me: So what kind of govt would have to run a classless society?
>
> Jonathon: Classless?
>
> Me: A society where everyone is economically equal
>
> Jonathon: Communism? Maybe.

Me: What kind of ruler?

Jonathon: Dictator, absolute power.

Me: You're pretty sharp – why?

Jonathon: Basically because he doesn't care how the individual feels.

Me: Hmmm…Classless would make the individual feel how?

Jonathon: They wouldn't have any incentive

Me: Perfect – you are thinking tonight my friend

Jonathon: I usually do.. I'm just not so great with books and reading and what not…For instance I "winged" this whole conversation.

Me: By winging you mean you were thinking not looking up answers in a book?

Jonathon: I suppose so, if you couldn't tell by my response time, lol.

Me: I could and I like the way you think, you should share your ideas more

Jonathon: In 1st hour…Ha

Me: Yes in first hr

[8:46 p.m.] Jonathon: The only thing that can be shared in there is Rebecca's opinion. Lol.

Jonathon: Sorry, I shouldn't have said that.

Me: That's ok, maybe if others would talk we would hear more opinions.

Jonathon's story illuminates the need for teachers to teach and share in ways that do not reinforce existing structures of domination (hooks, 2003). I was possibly so determined to create classroom conversation that it didn't matter to me who was doing the talking; I was perhaps contributing to the silence of voices by not resisting the dominant ones. Legitimate peripheral participation can be empowering when one is

moving toward full participation but when one is kept from participation it becomes very disempowering (Lave & Wenger, 1991). Whether consciously or unconsciously, teachers support existing hegemonic structures and unwittingly collude with those structures simply by the very nature of the organization of schools (hooks, 2003). Jonathon was aware of the dominance of one person and chose not to fight it. Even when he felt he had ideas that could contribute to class conversations, he closed himself off from the resources of learning and was alienated from full participation in the community (Lave & Wenger, 1991) until he found an outlet to share his knowledge: texting.

Summary of the seven voices

These stories give us a good picture of how texting affected the classroom conversation. They were prepared, motivated, and confident to speak in class but the illumination of the other issues is central to the study. One small activity, one change in a teaching method and so many immeasurable school issues came to the surface. "A successful move from legitimate to full participant typically appears to occur with minimal changes to practice or social relations" (Fuller, 2007, p. 17). We didn't completely alter life as we knew it in World History, but the changes did alter us all. Jonathon spoke of voices being silenced; Brandon taught about the need for teachers to show students that they care; Melissa provided insight on the value of empowerment; Shane wanted to give his genuine thoughts; Seth found some motivation to express his opinions; and Callie showed us how we could individualize instruction. Through the

seven voices and the original themes of easy, learn, feedback, challenge, and talk an overarching theme emerged: intellectual risk taking.

The overarching theme: Fostering intellectual risk taking

Intellectual risk taking implies that students are engaging in behavior that places them at risk of making mistakes or appearing less competent than others (Beghetto, 2009). It is a decision situation characterized by uncertainty or the possibility of failure (Kogart & Wallach, as cited in Beghetto, 2009).

Participating in a class discussion is risky; there is a chance that something one says could produce undesirable consequences (Byrnes, 1998). Students are reluctant because of a fear that their ideas may be dismissed or ridiculed (Beghetto, 2009). Action always involves risk (Neihart, 1999), which most certainly contributes to the passive nature of students. It is not surprising that students avoid risk taking. Decision making in schools has been stripped from the students' learning process when teachers or legislators decide what is to be learned. Error making is taught to be minimized and popular culture says failure is hazardous to student motivation (Clifford, 1991).

"Taking chances is essential to a rich and rewarding life" (Ilardo, 1992, p. 10). Clifford (1991) explains, by borrowing Vygotsky's zone of proximal development, that engaging in tasks just above one's current ability level is a form of intellectual risk taking that promotes learning and cognitive development, therefore there are many reasons why teachers should encourage intellectual risk taking. Taking risks elevates students to a higher level of maturity increasing potential for high achievement and leadership. By

fostering intellectual risk taking students had opportunities to realize their abilities and reduces feelings of helplessness and loss of control (Neihart, 1999).

An environment entangled in error avoidance is in conflict with a curriculum that encourages risk taking (Clifford, 1991). Therefore if the benefits of risk taking are to be recognized then the reinforcement and practices of schools must change. Common practices have cultivated the notion that school is boring, competitively threatening and cannot be achieved without extrinsic rewards (Clifford, 1991), but individuals who are able to make choices that provide appropriate challenges and feel supported by their teacher become intrinsically motivated, competent and self-determined (Deci & Porac, 1978). Teachers who promote intellectual risk taking view mistakes as opportunities to learn and try new things (Neihart, 1999). Beghetto (2007) identifies three key factors found in classrooms where students are more likely to take risks: personal interest, perceived confidence and teacher support. This idea of increased intellectual risk taking may only have taken place because students had experienced ease of use, depth of learning, meaningful feedback, and a sense of challenge.

Closing

Chapter four provides evidence for the themes of ease of use, depth of learning, meaningfulness of feedback, sense of challenge, and enhanced classroom conversation. Through the voices of the research participants, students told us that texting not only made it easier to accomplish the task of homework but that they found it easier to think while texting rather than while writing. Students perceived increased levels of learning

and they liked receiving feedback. They felt challenged when they were pushed to think more about a topic and when they felt confident and prepared they participated more willingly in classroom conversation.

The seven voices along with the themes culminated into an overarching theme of fostering intellectual risk taking. The findings in this study highlights the fact that if students are using their cell phones they are interested which in turn leads to a deeper involvement in the topic. By engaging in text message conversations with the teacher, students felt supported, cared about and empowered. The preparation via text messaging enabled students to gain enough confidence to engage in the risky behavior of sharing their thoughts and opinions during classroom conversation.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS FOR EDUCATORS

Situated learning theory served as a useful framework and as a means to think about what happens to classroom conversation when high school social studies students are first engaged in teacher-sanctioned text messaging about course content. This study contributes to the theory of situated learning by examining the connection between social contexts that unfold because of the role text messaging played in the dynamics of the classroom and the conditions that facilitated that change. Lave and Wenger's (1991) notion of situated learning as legitimate peripheral participation in communities of practice is the theoretical foundation of the current study. Using the words of students offered an approach that explains situated learning theory within vibrant classroom contexts when the outcomes of practice: homework transmission, feedback and discussion were used to transform social structures, learning and classroom practices. Not only did these themes emerge but students perceived that their homework assignments were more easily completed and transmitted, or turned in. they enjoyed receiving feedback and being encouraged to think more deeply so that they could produce a better answer. Relationships between students were enhanced as well as individual relationships between me and students. Because students felt confident in their abilities and were comfortable, our classroom conversations increased; even when text messaging wasn't a precursor. When text messaging was used in my high school classroom, students engagement increased. Text messaging can foster intellectual risk taking and improve

conversation by situating learning in a context where students are proficient and enthusiastically inclined.

Implications for theory

Lave and Wenger's (1991) comparison of situated learning to that of an apprenticeship demonstrates the teacher becoming facilitator, bestowing upon the students more difficult tasks, moving the learner closer and closer to full participation in the community. This participation in texting and in classroom conversation mattered to the success of the entire community and emphasized the members' need for one another. The activities of the community, (the texting), provide learners with an agenda for making sense of this specific sphere of their life within the social and cultural contexts in which a community of practice exists and which activities contribute or have a significant influence on what is learned and how learning takes place. When students were prepared to speak and felt confident and comfortable through the help or guidance of the teacher via text messaging they then became confident to speak and share opinions therefore there was more participation. Class discussions then helped students digest information, think more critically and share the products of their learning.

The ways in which a community of practice is structured (Lave & Wenger, 1991) in terms of its social relationships define the possibilities for learning. A student's identity played a key role in this notion of community, especially in relation to other members of the class. Did they see themselves as the introverted loner, "I don't want people to judge me," or the dummy, "I don't really know a lot about history," or the brain, "Haha, hit me, I got this!" How did these self identified concepts provide a sense of who they are and how they fit into the class (community)?

The text messaging provided learners with opportunities for legitimate peripheral participation LPP (Lave &Wenger, 1991). Being a participant provided meaning and gave value to their education. Lave and Wenger (1991) suggest that situated learning creates the possibility, for a transfer of learning between the school community and other communities of practice; mainly in this study, their technology uses at home. This study shows that a transfer of learning is possible between the texter and the student and that a transfer can be made from opinions given over a text to becoming a contributor to a class discussion. Practice is a social activity organized and sustained over time by communities of practitioners in order to reach a goal.

The conditions or situations that surround the business of schooling, have changed very little since the late 19th century. Schools normally seek to impose order on the bodies of children by mass compulsory schooling and through the manipulation of space and time (Foucault, 1977). Schools, often catering to a small proportion of people, teach to the average student mentality, requiring that teachers simply relay information (hooks, 2003) rather than providing an atmosphere where students are compelled to search for meaning, inquire, and generate learning (Brooks & Brooks, 1993). Text messaging allowed everyone opportunities of LPP (Lave & Wenger, 1991) and encouraged students to partake in intellectual risk taking. Situated learning theory explains that when learners flow through different forms of participation: texting, sharing, reflecting, or problem solving, they receive more access to learning resources. This access helps to underline the crucial character of peripheral participation in a community of practice as central for understanding and identity (Lave & Wenger, 1991). "It is in practice that people learn" (p. 85).

Implications for practice

Many children are dissatisfied and alienated with traditional school structures and that situation has the potential to lead to disengagement. Very little has been done to transform students from passive to active learners (Walkerdine, 1997). Most schools have worked diligently to implement policies banning the use of cell phones assuming that their use is detrimental to learning. This study has shown that by allowing and structuring cell phone use in the classroom students may be inclined to engage more fully in the learning process. The practice of schools that teach subjects rather than active individuals has created an atmosphere in which children are measured in terms of their capacity to acquire knowledge. This atmosphere of measurement also restricts the range of positions a student can take in relation to others in the community. One's position established normalcy within a practice and inscribes relations of power between students. "In first hour the only opinion is Rebecca's." Text messaging provided the opportunity for access when students might not otherwise have engaged.

The aspects of schooling that are valued by legislators, administrators and all too often teachers, are those things that can be observed and measured. Only using measurable items in the evaluations of students can lead to the production of learners who strive only for extrinsic rewards or grades. MacIntyre (1985) refers to this phenomenon as the dominance of extrinsic goods. He argues that "all practices generate both intrinsic and extrinsic goods but intrinsic goods are unique to the practice itself (conversation) and cannot be gained any other way then through whole hearted participation in a practice" (p. 190).

We are a nation accustomed to extrinsic rewards, always asking "What can I get for that?" or "What's in it for me?" Class conversation and being a legitimate peripheral participant in it requires learners to pursue the "'goods' or the qualities intrinsic to conversation (MacIntyre, 1985). In my classes text messaging helped realize this aspiration. We had to move toward class discussion and sharing what we had learned through individual text messages. The problem with transfer of knowledge decreases then since the goods intrinsic to conversation don't change depending on the setting in which they are practiced. The value of conversation may change or vary due to the setting, but the underlying concept is that if classroom conversation is to take place, it has to be valued intrinsically. When a student was engaged, was approached on their level and able to use a tool that was valued extrinsically he became confident as well as enjoyed the activity, the rewards became more inherently intrinsic (Lave &Wenger, 1991).

The potential to be realized is that text messaging used as an instructional tool can reconfigure and reconstruct the organization of the classroom and change the relations of power among students and between students and their teachers. As the DISCO lesson illustrated, students could fully participate in a class discussion through a variety of modes depending on their learning preferences. Students, within the safety of a text could ask questions that might go unanswered if not for the anonymity offered by the text. Teachers can provide feedback and assistance in a more logistic and timely manner moving students more effectively toward full participation. As these structural changes take place, students and teachers might engage in more intellectual risk taking. Text messaging, when conceptualized as part of the classroom as a community of practice (Wenger, 1998) created an atmosphere where students were more inclined to pursue the

intrinsic goods that came from engagement in class conversation. Text messaging built a bridge that students could cross over into a more actively engaged class participant.

Once they had been involved in class discussion and had practiced the art, they remained active participants even without the safety net that text messaging initially provided. Relationships had been built between teacher and student as well as among the students. Some students began to realize that their classroom experience was enhanced by their level of participation in classroom discussion and were more willing to take intellectual risks. Other students began to take advantage of an alternate method of communication and had started to reach out to ask questions or engage in conversation .

Recommendations for future research

Future research possibilities will include those activities that can further liberate education to consist of acts of cognition, not transfers of information (Freire, 2003). "Breaking the vertical patterns that are the characteristics of banking education can fulfill its function of being the practice of freedom" (Freire, 2003).

This study looks at a single function of the cell phone, text messaging. Cell phones, particularly smart phones, are incredible devices with magnificent potential in which most of us scratch only the surface. Future researchers could explore the many possible learning tools the cell phone could provide for educators yet the diffusion of innovations (Rogers, 2003) is often dependent on the advantages that can be seen from its use. As digital immigrant teachers are replaced with digital natives (Prensky, 2001), school leaders may begin to perceive the cell phone as compatible with learning. This study and others that explore the cell phone as learning tools can help diffuse the innovation of cell phone use in the classroom as early adopters experiment and see

positive results. The innovation will continue to spread to different segments of school populations as their use evolves to meet various needs (Rogers, 2003). Administrators may be slow to adopt the use of the cell phone in schools until they see an advantage for streamlining their own work. For example, a cell phone application may assist a principal in remotely accessing his student information system. This type of experience could move someone who has previously resisted the innovation toward a more accepting view of a new practice.

There are hundreds of applications, and surely more to come, where the cell phone can be a positive addition to the classroom. Teachers should look at other ways that cell phones could be used in high school classrooms. A future researcher could compile applications that are beneficial for the classroom and create training opportunity for educators. This study would also be interesting from an outside perspective rather than from a teacher researcher; would the results or findings differ if the researcher was not directly involved with the students? As the literature indicated, technology use in the classroom is often as prolific as the teacher's skills; a study of this nature might be entirely different if the teacher was less adept at cell phone use and texting. This study could show whether the comfort level of the teacher is important for the growth of the students. If a teacher was required to use a device such as the cell phone to communicate with their students, would their perspective on the complications associated with a cell phone hamper the benefits? This study has demonstrated that the cell phone acted only as a bridge that students willingly crossed over in order to become more fully engaged in classroom conversation; the increased participation was the key.

Closing

This study explored social context and processes to define how different practices, a change in relationships, and the way students engaged in the novel learning activity of text messaging created a learning community who were impelled intrinsically to converse with one another. By exploring several aspects related to student learning and by placing emphasis on text messaging as an activity that situated the learner in a mutually constitutive world, this study provided the opportunity to "escape from the tyranny of the assumption that learning is the reception of factual knowledge or information" (Lave & Wenger, 1991, preface). I have realized that I could not just tell my students that it was acceptable to make mistakes. I could not just tell them to respect the thoughts and opinions of others. I could not just ask throw out a discussion question and instruct them to talk. I had to provide an outlet, a medium in which they could practice, gain confidence and move slowly toward full participation. My findings have produced the realization the text messaging has a positive place in the high school social studies classroom fostering students' abilities and willingness to engage more fully and critically in classroom conversation. The study encourages educators to dissolve the barriers that restrict the use of cell phones and intentionally construct classroom practices that encourage conversations, multiple perspectives and collaboration among students. As a teacher researcher my perspectives and awareness on the importance of communication, feedback, relationships, and providing students with challenging and meaningful tasks has changed my work in the classroom. I will continue to use text messaging as a bridge for which students can cross over into a more engaging classroom experience.

REFERENCES

Akers, J. (n.d.). Student cell phones should be prohibited in K-12 schools. *Editorial for Kentucky Center for School Safety.* Retrieved from www.kysafeschools.org/pdfs-docs/hotpdfs/call%20phones.pdf.

Alvermann, D.E., Dillon, D.R., & O'Brien, D.G. (1987). Using discussion to promote reading comprehension. Newark, DE. International Reading Association.

Anderson, J.R., Reder, L.M. & Simon, H.A.(1996). Situated learning theory in education. *Educational Researcher.* Vol. 25 (4), 5-11.

Andrews, S. V. (1989). Changing Research Perspectives: A Critical Study of Elliot Eisner. *Journal of Curriculum and Supervision*, 106-125.

Arnseth, H.C. (2008). Activity theory and situated learning theory; contrasting views of educational practice. *Pedagogy, Culture and Society.*16. 289-302.

Astin, A. W. (1980). When does a college deserve to be called 'high quality'? In *Improving Teaching And Institutional Quality: Current Issues in Higher Education 1*. Washington, DC: American Association for Higher Education.

Atwood, S., Turnball, W., Carpendale, J.I.M. (2010). The construction of knowledge in classroom talk *Journal of Learning Science.* 19 (3), 358-402.F

Axelson & Flick (2011).Defining Student Engagement. *The Magazine of Higher Learning*. 43(1), 38-43.

Baumann, J. F., & Duffy, A. M. (2001). Teacher-researcher methodology: Themes, variations, and possibilities. *The Reading Teacher, 54*, 608-615.

Becker, H. (1972). A school is a lousy place to learn anything in. *American Behavioral Scientist*. 16, 85-105.

Beghetto, R. A. (2009). Correlates of intellectual risk taking in elementary school science. *Journal of Research in Science Teaching, 46,* 210-223.

Berger, P.L. & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise its the Sociology of Knowledge*. Garden City, NY: Anchor Books.

Betts, F. (1992). How systems thinking applies to education. *Educational Leadership,* 506(3), 38-41.

Bochner, A.P. (2001). *Narrative Virtues*. Qualitative Inquiry, 7 (2), 131-157.

Boss, C. (2007, December 10). Text messages may be classroom conduit. *The Columbus Dispatch.* Retrieved from http://www.dispatch.com/content/stories/local/2007 /12/10/TEXT.ART_ART_12-10-07_A1_QH8NRUQ.html

Bracey, G.W. (2003). *On the death of childhood and the destruction of public schools.* Portsmouth, N.H. Heineman.

Bradbury, H. & Reason, P. (2006) *Handbook of Action Research.* Thousand Oaks, CA: Sage.

Brophy, J.E. (2004). *Motivating students to learn*. Mahwah, NJ: Lawrence Erlbaum Associates.

Brophy, J.E. (2008). Developing students' appreciation for what is taught in school. *Educational Psychologist*. 43, 132-140.

Brooks, J.G. & Brooks, M.G. (1999). The courage to be constructivist. *Educational Leadership* . 57(3), 18-24.

Brown, P.U. (2010). Teacher research and university institutional review boards. *Journal of Early Childhood Teacher Education,* 31, 276-283.

Bruffee, K. A. (1993). *Collaborative learning: Higher education, interdependence, and the authority of knowledge*. Baltimore, MD: Johns Hopkins University.

Buckingham, D. (2007). *Beyond technology: Children'sleearning in the age of digital culture*. Cambridge: Polity.

Burn, A., Buckingham, D., Parry, B., & Powell, B. (2010). Minding the gaps: Teachers' cultures, students' cultures. In D. E. Alverman (Ed). *Adolescents' online literacies: Connecting classrooms, digital media, and popular culture*. pp.183-201. New York, NY: Peter Lang Publishing, Inc.

Buzzard34. (2007, Jul7 16). *Associated content.* Retrieved January 3, 2011, from Yahoo: www.associatedcontent.com

Byrnes, J.P. (1998). *The nature and development of decision-making: A self-regulation model*.Hillsdale, NJ: Erlbaum.

Camplese, C. (2008). *Enabling the new classroom conversation* [Video]. University of South Florida, College of Public Health: Youtube.

Camus, A. & O'Brien, J. (1975). *The myth of Sisyphus*. Penguin books.

Carmichael, S.B., Martino, G., Porter-Magel, K., & Wilson, W.S., (July 2010). Thomas B. Fordham Foundation and Institute, Washington, D.C. www.fordhaminstitute.org

Castle, K. (2006). Autonomy through pedagogical research. *Teaching & Teacher Education: An International Journal of Research and Studies*, 22(8), 1094-1103.

Castle, K. (2012). *Early childhood teacher research; From questions to results*. New York, NY: Routledge.

Catalano, R. F., Haggerty, K. P., Oesterle, S., Fleming, C. B., & Hawkins, J. D. (2004). The importance of bonding to school for healthy development: Findings from the Social Development Research Group. *Journal of School Health, 74,* 252-261

Cavanagh S. (1997). Content analysis: concepts, methods and applications. *Nurse Researcher*, 4, 5–16.

Cazden, C. (2001). *Classroom Conversation: The Language of Teaching and Learning.* Portsmouth, NH: Heineman.

Chickering, A. & Gamson, Z., (1987). Seven principles for good practice in undergraduate education, *AAHE bulletin*, (39) 3-7.

Choy, S., McNickle, C. & Clayton, B. (2009). Learner expectations and experiences. Student views of support in online learning, *National Centre for Vocational Education Research.*

Clandinin, D.J. & Connelly, F.M. (2000). *Narrative Inquiry, Experience and Story in Qualitative Research.* San Fransicso, CA. Jossey-Bass.

Cleveland, B.F. (1986). *Master teaching techniques (3rd edition).* Stone Mountain, GA: Connecting Link Press.

Clifford, M.M. (1991). Risk taking: Theoretical empirical, and educational considerations. *Educational Psychology*. 26, 263-297.

Cochran-Smith, M. & Lytle, S. (1999). The teacher research movement. A decade later. *Educational Researcher*. 28(7), 15-25.

Cochran-Smith, M., & Lytle, S.L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York, NY: Teachers College Press.

Coffey, H. (2009). *Zone of proximal development.* Learn NC. retrieved February 2, 2012. www.learnnc.org

Collins, P.K.S. (2003). In review of *Silenced voices and extraordinary conversations: Re-imagining schools*.*The Initiative Anthology*. Retrieved June 12, 2012 from www.muohio.edu/initiativeanthology/

Conroy, D.L. (1987). A phenomenological study of police officers as victims. (Unpublished doctoral dissertation). The Union Institute, Cincinnati, OH.

Corbeil, J. R., & Valdes-Corbeil, M. E. (2007). Are you ready for mobile learning? *Educause Quarterly*, *30*(2). Retrieved from http://www.educause.edu.

Cowan, J. (2010). Webkinz, blogs, and avatars: Lessons learned from young adolescents. In D. E. Alverman (Ed), *Adolescents' online literacies: Connecting classrooms,*

digital media, and popular culture. pp 27-49. New York, NY: Peter Lang Publishing, Inc.

Deci, E.L. & Porac, J. (1978). Cognitive evaluation theory and the study of human motivation. In M.R. Lepper & D.Green (Eds), *The hidden costs of reward: New Perspectives on the Psychology of human motivation*. p. 149-176. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Dede, C. (2009). Comparing frameworks for "21st Century Skills." Paper presented at Harvard Graduate School of Education.

Delpit, L., & Dowdy, J. K. (2002). *The Skin That We Speak.* New York: The New Press.

DeMarrais, K. & Lapan, S.D. (2004). *Foundations for research; Methods of inquiry in education and the social sciences*. Mahwah, NJ. Lawrence Erlbaum Associates.

Denzin, N.K. & Lincoln, Y.S. (2005). *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage.

Doll, W.E. (1993). *A postmodern perspective on curriculum.* New York, NY: Teachers College Press.

Downe-Wamboldt B. (1992) Content analysis: Method, applications and issues. *Health Care for Women International*, 13, 313–321.

Drouin, M., & Davis, C. (2009). R u txting? Is the use of text speak hurting your literacy? *Journal of Literacy Research*, 41(1), 46-67.

Dezuanni, M. (2010). Digital media literacy: Connecting young people's identities, creative production and learning about video games. In D. E. Alverman (Ed),

Adolescents' online literacies: Connecting classrooms, digital media, and popular culture. pp 125-143. New York, NY: Peter Lang Publishing, Inc.

Duckworth, E. (2006). *The Having of Wonderful Ideas.* New York, NY: Teachers College Press.

Eccles, J.S. & Gootman, J.A. (2002). *Community programs to promote youth development*. National Academy Press. Washington DC.

Edwards, O. (2007). High tech high. Retrieved April, 1, 2007 from http//www.edutopia.org/hightechhigh.

Edwards, V.B. (2007). Technology counts 2007: A digital decade. *Education Week*, 26 (30), 8-50.

Education Oversight Board/Office of Accountability. *2011 School Report Card*. Retrieved from www.schoolreportcard.org

Eisner, E. (2002). The Kind Of Schools We Need. *Phi Delta Kappan*, 576-583.

Ellis, L., & Castle, K. (2010). Teacher research as continuous process improvement. *Quarterly Assurance in Education*, 18(4), 271-285.

Elmore, R.E. (2009). Schooling adolescents. In R.M. Lerner & L. Steinberg (Eds.), *Contextual Influences on Adolescent Development, Volume 2 of Handbook of Adolescent Psychology (3rd Ed.)*. Hoboken, NJ: Wiley.

Erlandson, D.A., Harris, E.L., Skipper, B.L. & Allen, S.D. (1993). *Doing naturalistic inquiry: A guide to methods*. Sage Publications.

Fine, M., & Weis, L. (2003). *Silenced voices and extraordinary conversations: Re-imagining schools.* New York, NY: Teachers College Press.

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research, 59*, 117-142.

Finn, J.D., & Voelkl, K.D. (1993). School characteristics related to student engagement. *The Journal of Negro Education.* Vol. 62 (3), 249-268.

Fosnot, C.T. (1989). *Enquiring teachers, enquiring learners: A constructivist approach for teaching*. New York, NY: Teachers College Press.

Foucault, M. (1977). *Discpine and Punish.* London: Tavistok.

Fox, S. (2000). Communities of Practice, Foucault and actor-network theory. *Journal of Mangagment Studies. 37, 853-867.*

Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence, *Review of Educational Research, 74*(1), 59-109.

Fredericks, J.A. (2011). Engagement in school and out-of-school contexts: A multidimensional view of engagement. *Theory into Practice.* 50(4), 327-335.

Freire. P. (2003). *Pedagogy of the Oppressed, 30th Anniversary Edition*. New York, NY. Continuum International Publishing Group.

Fuller, A. (2007). Critiquing theories of learning and communities of practice. In: Hughes J., Jewson, N., Unwin, L. (eds). *Communities of Practice, Critical Perspectives*. London: Routledge, 17-29.

Furrer, C. & Skinner, E.A. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95, 148-162.

Geary, M. (2008). Supporting cell phone use in the classroom. *Florida Association for Supervision and Curriculum Development*, 29-32.

Gergen, K. (2009). *An invitation to social construction*. Thousand Oaks, CA: Sage Publications.

Gewertz, C. (October,2008). States press ahead on 21st century skills. *Education Week*.

Gewirtz, S., Shapiro, J., Maguire,M., Mahoney, P., & Crib, A. (2009). Doing teacher research: a qualitative analysis of purposes, processes and experiences. *Educational Action Research*, 17(4), 567-583.

Gibbons, S. (2007) *Understanding and engaging the net generation*. Retrieved from http://www.educause.edu/

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *Journal of Early Adolescents*, 13, 21-43.

Goodson, I. 1997. *The changing curriculum: Studies in social construction*, New York: Peter Lang

Grant, G., & Murray, C. E. (2002). *Teaching in America: The slow revolution*. Cambridge, MA: Harvard University Press.

Grant, M.M., & Branch, R.M. (2005). Project-based learning in a middle school: Tracing abilities through the artifacts of learning. *Journal of Research on Technology in Education*, 38(1), 65-98.

Gray, A. (2007). *Constructivist teaching and learning: SSTA Research Centre Report 97*. Regina, Canada: Saskatchewan School Boards Association Research.

Greeno, J., Smith, D. R., & Moore, J. L. (1993) Transfer of situated learning. In D. K. Detterman & R. J. Sternberg (Eds.), *Transfer on trial: Intelligence, cognition, and instruction* (pp. 99-167). Norwood, NJ: Ablex.

Hargreaves, D. (1999). The knowledge creating school. *British Journal of Educational Studies*, 47, 122–44.

Harry, V. (2003). Constructivist learning and teaching. *Mediterranean Association of International Schools.* Retrieved from http://www.maisk-6scienceinquiry.org/teaching.htm

Hartnel-Young, E. & Vetere, F. (2008). A means of personalizing learning: Incorporating old and new literacies in the curriculum with mobile phones. *The Curriculum Journal.* 19 (4), 283-292.

Hay, L. (1984). *A futurist's view of technology in education*. Paper presented at the annual conference of the Association for Educational Communication and Technology, Dallas, TX.

Heafner, T. (2004). Using technology to motivate students to learn social studies. *Contemporary Issues in Technology and Teacher Education*, 42-53.

Hess, F.M. (2004). Common sense school reform. New York, NY: Palgrave Macmillan.

Hickey G. & Kipping E. (1996) A multi-stage approach to the codingof data from open-ended questions. Nurse Researcher 4, 81–91.

Hirsch, E.D. (2010). *The schools we need: And why we don't have them.* Anchor; 1st Anchor Books ed Edition..

hooks, b. (2003). *Teaching community; Pedagogy of hope*. New York, NY: Routledge.

Hopkins, D. (2002). *A teacher's guide to classroom research*. Philadelphia: Open University Press.

Howe, N. & Strauss, W. (2000). *Mellennials rising: The next great generation.* Vintage.

Hsieh, H-F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Researcher*, 15 (9) 1277-1288.

Huba. M.E., & Freed, J. E. (2000). *Learner-Centered Assessment on College Campuses*. Boston, MA: Allyn and Bacon.

Hughes, J. (Producer & Director). (1986). *Ferris Buellerr's day off* [Motion picture]. USA: Paramount Pictures.

Hughes, J.N., Kwok, O. (2006). Classroom engagement mediates the effect of teacher-student support on elementary students' peer acceptance: A prospective analysis. *Journal of School Psychology*. 43,465–480.

Ilardo, J. (1992). *Risk taking for personal growth*. Oakland, CA: Harbinger Publications

Johnson, B. (1993). Teacher-as-researcher. Washington DC: ERIC Clearinghouse on Teacher Education.

Jonassen, D. H., Peck K. L. & Wilson, B. G. (1999). *Learning with technology: A constructivist perspective*. Upper Saddle River, NJ: Merril.

Kakavelakis, K., & Edwards, T. (2011). Situated learning theory and agentic orientation: A relational sociology approach. *Management Learning*. Retrieved from mlq.sagepub.com/

Kaufman, B. (February, 2012). Beautiful Minds: How convergent and divergent thinking foster creativity, IQ type reasoning is only one slice of the creativity pie. *www.pshcyhologytoday.com*

Kay, A. (n.d.). Technology quotes. Retrieved from www.slideshare.net/aballing/technology-quotes

Ketch, A. (2005). Coversation: The comprehension connection. *The Reading Teacher*.59 (1), 8-13.

--Kim, D., Solomon, D., & Roberts, W. (1995). *Classroom practices that enhance students' sense of community*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Kindermann, T. A. (2007). Effects of naturally existing peer groups on changes in academic engagement in a cohort of sixth graders. *Child Development, 78,* 1186-1203.

Klem, A.M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. In *Tenth Biennial Meeting of the Society for Research on Adolescents* (pp. 1-47). Baltimore, MD Institute for Research and Reform in Education.

Kleibard, H.M. (1994). *The struggle for the American curriculum: 1893-1958.2nd edition.* Boston, MA: Routledge.

Koebler, J. (2011, October 26). *Teachers use cell phones in the classroom.* Retrieved from usnews.com

Kohn, A. (1999). *The schools our children deserve; Moving beyond traditional classrooms and Tougher Standards.* Boston, MA: Houghton Mifflin.

Kohn, A. (2000). *The case against standardized testing; Raising test scores, ruining the schools.* Portsmouth, NH. Heinemann.

Kondraki, N.C., Wellman, N.S., Amundson, D.R. (2002). Content analysis: review methods and their applications to nutrition education. *Journal of Nutrition Education and Behavior*. 34, 224-230.

Krashen, S.D., & Terrell, T.D. (1983). *The natural approach: Language acquisition in the classroom*. San Francisco: CA. The Alemany Press.

Kukulska-Hulme, A. (2005). Current uses of wireless and mobile learning. *JISC-funded Landscape Study Report.* Retrieved from http:// www. jics.com.

Langer, E. (1998). *The Power of Mindful Learning.* Jackson, TN: Perseus Books.

Lave, J. (2008). Epilogue: Situated Learning and Changing Practices. In: A. Amin & J. Roberts (Eds), *Community, economic, creativity and organization.* (pp. 283-296).Oxford, England: Oxford University Press.

Lave, J. & Wenger, E. (1991). *Situated Learning: Legitimate peripheral participation.* Cambridge, MA: Cambridge University Press.

Lenhart, A. (2007). Cyberbullying. *Pew Internet & American Life Project.* Retrieved from http: pewinternet.org.

- -Levin, H. (2001). *Raising standards or raising barrier*s. New York, NY: Century Foundation Press.

Levy, F., & Murname, R.J. (2004) *The new division of labor: How computers are creating the next job marke*t. Princeton, NJ: Princeton University Press.

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues,* 2.

Lewis, N.S. (2004). The intersection of post modernity and classroom practice. *Teacher Education Quarterly,* 119-134.

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry.* Newbury Park, CA: Sage

MacIntyre, A. (1985) *After Virtue: A Study in Moral Theory* (2nd edn). London, England: Duckworth.

Mario, D. (2008, February 15). *Texting 101: Craik students using cellphones in classroom*. Retrieved from www.canada.com/saskatoonstarphoenix/news/story.html

Mathis, W. J. (2010). *The "Common Core" Standards Initiative: An Effective Reform Tool?* Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. Retrieved June 5, 2012 from http://epicpolicy.org/publication/common-core-standards

Mayring, P. (2000). Qualitative content analysis. *Qualitative Social Research, 1*(2), 20. Retreived from http://www.qualitative-research.net/fqs-texte/2-00/2-00mayring-e.htm

McGraw-Hill. (n.d.). *Cell Phones in the Classroom.* Retrieved from Teaching Today: www.teachingtoday.glencoe.com

McTavish, D.G., & Pirro, E.B. (1990). Contextual content analysis. *Quality and Quantity.* 24, 245-265.

McTighe, J., & O'Connor, K. (2005). Seven practices for effective learning. *Educational Leadership, Association for Supervision and Curriculum Development.* 63, 10-17.

Merchant, G. (2010). View my profile (s). In D. E. Alverman (Ed), *Adolescents' online literacies: Connecting classrooms, digital media, and popular culture*. pp 51-69. New York, NY: Peter Lang Publishing, Inc.

Meyers, E., & Rust, F. (2003). *Taking action with teacher research*. Portsmouth, NH: Heinemann

Mutch, A., Delbridge, R., & Ventresca, M. (2006). Situated organizational action: The relational sociology of organizations. *Organization,* 13, 607-625.

National Council for the Social Studies. (2002). *National standards for social studies teachers*. Retrieved from www.shawnee.edu/acad/te/PDF/NCSS%20Teacher%20Standards.pdf

National Governors Association Center for Best Practices, Council of Chief State School Officers. (2010). Common Core State Standards. *National Governors Association*

Center for Best Practices, Council of Chief State School Officers, Washington D.C.

Newman, F., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. Newmann (Ed.), *Student engagement and achievement in American secondary schools.* pp. 11-39. New York, NY: Teachers College Press.

Nicol, D. & Macfarlane, D., (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, Routledge. (31). 199-218.

Nielsen Mobile. (2008). *Texting now more popular than calling*. [Press Release]. Retrieved from http://www.nielsenmobile.com

Neihart, M. (1999). *Systematic risk taking*. Roeper Review, 21, 289-292.

O'Neil, J., & Tell, C. (1999).Why students lose when "tougher standards" win: A Conversation with Alfie Kohn. *Educational Leadership,* 57, 18-22.

Osterman, K.F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70,323-368.

Patton, M. (2002). *Qualitative research and evaluation methods* (3rd ed). Thousand Oaks, CA: Sage Publications.

Pew Internet & American Life Project. (2005). Teens and technology. Retrieved November 12, 2006:http://www.pewinternet.org/topics.asp?c=4.

Phillips, V., & Wong, C.(2010). Tying together the common core of standards, instruction, and assessments. *Phi Delta Kappan*, 91(5), 37-42.

Piaget, J. (1977). *The development of thought: Equilibration of cognitive structures*. (A. Rosin, Trans). New York, NY: The Viking Press.

Pine, G.J. (2009). *Teacher action research*. Los Angeles, CA: Sage.

Porath, S. (2011). Text messaging and Teenagers: A review of the literature. *Journal of the Research Center for Educational Technology*.7 (2), 86-99.

Prensky, M. (2001). Digital natives, digital immigrants, Part II: Do they really think differently? *On the Horizon* 9 (6), 1-5.

Prensky, M. (2005). Listen to the natives. *Educational Leadership*. 63 (4), 8-13.

Prensky, M. (2005). What can you learn from a mobile phone? Almost anything! *Innovate*. 1 (5). Retrieved from http://www.innovateonline.com.

Prensky, M. (2006). *Don't bother me Mom – I'm learning*. St. Paul, MN: Paragon House.

Raymond, M.E., & Hanushek, E.A.(2003). High-stakes research. *Education Next*, 3(3), 48-55.

Richardson, V. (1994). Conducting research on practice. *Educational Researcher*. 23(5), 5-10.

Rogers, E.M. (2003). *Diffusion of Innovations*. New York, NY: Free Press.

Rotherham, A. J., & Willingham, D.T. (Spring, 2010). "21st-Century" skills; Not new, but a worthy challenge. *American Educator.* 17-20.

Routman, R. (2000). *Conversations: Strategies for teaching, learning. and evaluating.* Portsmouth, NH: Heinemann.

Ryan, A.M. (2000). Peer groups as a context for the socialization of adolescents' motivation. Engagement, and achievement in school. *Educational Psychologist*, 35, 101-111

Scribner, S., & Cole, M. (1981). *The psychology of literacy*. Cambridge, MA: Harvard University Press.

Shernoff, D.J., & Csikzentmihalyi, M. (2009). Flow in schools: Cutivating engaged learners and optimal learning environments. In R. Gilman, E.S. Huebner, & M.J. Furlong (Eds). *Handbook of positive psychology in schools* (pp 131-146). New York, NY: Routledge.

Shulman, L.S. (1997). Disciplines of inquiry in education: A new overview. In R.M. Jaeger (Ed.), Complementary methods for research in education (2nd ed., pp. 3-29). Washington, DC: American Educational Research Association.

Silva, E. (2009). Measuring skills for 21st-century learning. *Phi Delta Kappan*, 90 (9), 630-634.

Solomon, D., Watson, M., Battisch, V., Schaps, E. & Delucchi, K. (1996). Creating classrooms that students experience as community. *American Journal of Community Psychology*, 24, 719-748.

Spires, H.A., Lee, J.K., Turner, K.A. (2008). Having our say: Middle grade student perspectives on school, technologies, and academic engagement. *Journal of Research on Technology in Education,* 40 (4), 497-513.

Stake, R. E., & Trumbull, D. J. (1982.). Naturalistic generalizations. *Review Journal of Philosophy & Social Science*. 7 (1,2) 1-12.

Stenhouse, L. (1981). What counts as research? *British Journal of Educational Studies*, 29 (10), 103-114.

Subrahmanyam, K. & Greenfield, P.M. (2008). Online communication and adolescent relationships. *The Future of Children.* http://futureof children.org.

Taubman, P.M. (2009). *Teaching by numbers: Deconstructing the discourse of standards and accountability in education*. Routledge.

Taulbert, C.L. (2006). *Eight habits of the heart for educators*. Thousand Oaks, CA: Corwin.

Thomas, K., Orthober, C., & Schultz, N. (2009). Using Text-Messaging in the Secondary Classroom. In I. Gibson et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2009* (pp. 2159-2164). Chesapeake, VA: AACE.

Thurlow, C., & Poff, M. (2011). Text messaging. In S. C. Herring, D. Stein & T. Virtanen (Eds.), *Handbook of the Pragmatics of CMC*. Retrieved from faculty.washington.edu/thurlow/publications.html

Upland High School. (n.d.). Retrieved from http://uplandhigh.org

Vasudevan, L., DeJaynes, T., & Schmier, S. (2010). Multimodal pedagogies: Playing, teaching and learning with adolescents' digital literacies. In D. E. Alverman (Ed), *Adolescents' online literacies: Connecting classrooms, digital media, and popular culture*. pp 5-25. New York, NY: Peter Lang Publishing, Inc.

Vivalis, B., & Vivalis, S.L. (2004). Why are we learning this? What is this good stuff for, anyway? The importance of conversation if the classroom. *Phi Delta Kappan*, 86(4), 282-287.

Voelkl, K. E. (1997). Identification with school. *American Journal of Education*, *105*, 204-319.

von Glaserfeld, E. (1989). Cognition, construction of knowledge, and teaching. *Synthese*, *80*(1), 121-140.

Vygotsky L.S. (1962). *Thought and Language*. Cambridge, MA: Massachusetts Institute of Technology.

Vygotsky, L.S. (1978, 1934). *Mind in society, Development of higher psychological processes.* edited by Cole, M., Steiner, J.,Scribner, S., & Souberman, E., Cambridge, MA: Harvard

Walkerdine, V. (1997). Redefining the subject in situated cognition theory. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: social, semiotic and psychological perspectives* (pp. 57-70). Mahwah, NJ: Erlbaum.

Weber, R.P. (1990). *Basic content analysis.* Sage Publications.

Wentzel, K.(1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*. 90, 202–209.

Wenger, E. (1998). *Communities of practice: learning, meaning and identity*. Cambridg, MA: Cambridge University Press.

Whitehurst, G, (2009, October 14). *Don't forget curriculum*. Providence, RI: Brown Center Letters on Education, #3. Retrieved February 11, 2010, from http://www.brookings.edu/papers/2009/1014_curriculum_whitehurst.aspx.

Willet, R. (2009). 'It feels like you've grown up a bit': Bebo and teenage identity' paper presented at the ESRC Seminar Series: The educational and social impact of new technologies on young people in Britain. Available at http://education.ox.ac.uk/esrcseries/uploaded/Seminar%204%20Report.pdf. (pp. 28-34).

Wilson, E., & Wright, V. (2010). Images Over Time: The intersection of social studies through technology, content and pedagogy. *Contemporary Issues in Technology and Teacher Education*, 220-233.

World Vision. (1992). *Participatory planning and the evaluation process.* Monrovia, CA World Vision International Evaluation Department.

Yazzie-Mintz, E. (2007). National high school student engagement survey by IU reveals unengaged students. Indiana University Bloomington, School of Education. retrieved from www.indiana.edu

Zimmer-Gembeck, M.J., Chipuer, H.M., Hanisch, M., Creed, P.A., & McGregor, L. (2006). Relationships at school and stage environments fit as resources for adolescent engagement and achievement. *Journal of Adolescents*, 29, 911-933.

VITA

Trina Sue Resler

Candidate for the Degree of

Doctor of Philosophy

Thesis: "MY WHOLE LIFE IS ON MY PHONE" :HOW DO YOU SITUATE LEARNING FOR A DIGITAL WORLD?

Major Field: Curriculum and Social Foundations

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Education:

Completed the requirements for the Master of Science in Public School Administration at The University of Central Oklahoma, Edmond, Oklahoma, 2002.

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Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: "MY WHOLE LIFE IS ON MY PHONE": HOW DO YOU SITUATE LEARNING FOR A DIGITAL WORLD?

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Major Field: Education: Curriculum and Social Foundations

Scope and Method of Study: The purpose of this teacher research study was to discover what happens in the classroom when high school social studies students enrolled in world history classes are asked to use text messaging as part of the planned curriculum. Lave and Wenger's (1991) Situated Learning Theory was used in order to provide a framework for understanding how text messaging, used as an instructional tool, could reconfigure and reconstruct the organization of the classroom.

Findings and Conclusions: Text messaging has a positive place in the classroom fostering students' abilities and willingness to engage more fully and critically in classroom conversation by easing the completion and transmission of homework, allowing feedback, creating opportunities to think more critically and enhancing conversations in the classroom. Text messaging provided situated learning so that students were using the cell phone as a learning tool. They were adept and enthusiastic; therefore they were more inclined to take intellectual risks in the classroom. Emergent themes included ease of use, depth of conversation, meaningfulness of feedback, sense of challenge, and enhanced classroom conversation. The overarching theme was the fostering of intellectual risk-taking.

ADVISER'S APPROVAL: Dr. Pamela U.Brown